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ABSTRACT

This paper presents a methodology for using the Benjamin Structural Analysis of Social Behavior (SASB) model in individual, couple and family therapy to describe relations among self-concept, early history and adult relationships. The SASB model of two-person social interactions defines behavioral opposites, complements, antidotes and introjections. The model describes dyadic social interactions in terms of focus, affiliation, interdependence and topic. Topics include: primitive basics; approach-avoidance; need fulfillment, contact, nurturance; attachment; logic and communication; attention to self development; balance in relationship; intimacy-distance; and identity. The model has been confirmed by factor analysis, circumplex analysis, dimensional ratings and autocorrelations. Details of questionnaires, computer programs used to analyze data and interpretation of output are offered for both the clinician and the researcher. (Author/SE)

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A Manual for Using SASB Questionnaires to Measure Correspondence Among Family History, Self-Concept and Current Relations With Significant Others

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Abstract

Benjamin's SASB model (1974, 1977, 1978, 1979) of two-person social interactions defines behavioral opposites, complements, antidotes and introjections. The model describes dyadic social interactions in terms of focus, affiliation, interdependence and topic. Topics include: primitive basics; approach-avoidance; need fulfillment, contact, nurturance; attachment; logic and communication; attention to self development; balance in relationship; intimacy-distance; and identity. The model has been confirmed by factor analysis, circumplex analysis, dimensional ratings and autocorrelations. The present paper presents a methodology for using the model in individual, couple and family therapy to describe relations among self-concept, early history and adult relationships. Details of questionnaires, computer programs and interpretation of output are offered for both the clinician and the researcher.

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The present purpose is to provide a succinct methodology for measuring and communicating some basic well-known clinical principles of personality development and psychotherapy. Broadly speaking these principles are: (1) Perception of early childhood experiences, especially those in the family, affects feelings about the self and relations with significant others in adulthood. (2) Stable relations with important others in adulthood show reciprocity or complementarity. Sadists find masochists; exploiters find martyrs; when reciprocity is not maintained, couples divorce and/or seek therapy. (3) Important primitive issues in personality development and adult relationships are murderous attack, tender sexuality, power and separate territory. Many clinical interpersonal issues can be interpreted in terms of interplay among these basic elements. (4) As an individual understands the relevance of his/her family experiences to his/her adult relationships, and principles of complementarity he/she takes effective steps toward more satisfactory adjustment. (5) An explicit understanding of principles (1) through (4) can assist in therapeutic goal-setting, in guiding therapeutic interventions, and in facilitating patient-directed personal growth.

The Model

Structural Analysis of Social Behavior (SASB) is summarized by the model shown in Figure 1 (Benjamin, 1979). Organization of the

model and its relation to previous work is described in detail else-

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Insert Figure 1 about here

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where (Benjamin, 1974, 1977, 1979) and a very brief description as presented in McLemore and Benjamin (in press) is reproduced here.

"The horizontal axis in all three diamonds is affiliation (love-hate). The vertical axis is interdependence with maximum interdependence at the bottom of each diamond and maximum independence at the top. Because of its detailed structure, the SASB model has desirable versatility on the molar-molecular dimension, in that all 72 interpersonal chart points on the first two surfaces can be used, or they can be collapsed into two sets of four complementary quadrants (see Table 1). Note that the top half of each of the top two

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Insert Table 1 about here

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surfaces represent behaviors not saturated with control, either in the sense of dominance (controlling the other) or submission (being controlled by the other).

There are four major advantages related to the fact that the model was constructed using mathematical logic as well as a large number of empirical analyses: (1) Opposite behaviors are defined at 180° angles, e.g., the opposite of 114 (show empathic understanding)

is 134 (delude, divert, mislead). (2) Complementary behaviors, those which tend to draw each other, are defined and can be used to show what interpersonal behavior can be expected to accompany what other interpersonal behavior, e.g., 214 (clearly express oneself) is the complement of 114 (show empathic understanding), and 234 (uncomprehending agreement, a kind of hostile submission) is the complement of being effectively misled by 134 (delude, divert, mislead). (3) Antitheses can be specified, i.e., the model prescribes what behavior to enact in order to draw out the opposite of what is at hand, specifically the opposite of its complement. For example, if someone is diverting and misleading the therapist (a form of hostile power), the antithetical behavior would be 214, such as the statement, "I'd like to believe what you're saying but I'm having a little trouble" (friendly autonomy). In an affiliative relationship, this kind of "I" statement seems to draw the deceiver toward developing more understanding of the speaker. If the nodal point in the relationship is hostile, however, there would be increasing attempts at deception and hostile control. In terms of the model, augmented deceit is the deceiver's antithesis to the benevolent person's gesture to put the relationship on more respectful and friendly grounds. (4) Finally, the Benjamin model explicitly translates the psychoanalytic idea of introjection into geometric terms and, in so doing, specifies ways in which interpersonal experiences affect one's treatment of oneself.

The third (bottom) diamond of Figure 3 thus indicates what happens if the behaviors charted on the top diamond are turned inward. If a child has a parent who routinely uses hostile power, like blaming (135) for example, and the child turns the hositle power on him/herself, he/she becomes guilty (chart point 335). A constructive encounter with a benevolent therapist who shows empathic understanding (114) may reverse this trend toward self blame and, in time, result in the introjection of the therapist's good will (314, an integrated solid core)."

The Questionnaires

The questionnaire items describing each of the chart points on the full model are presented along with the simple version of the model in Table 1. For different relationships and contexts, the subject rates the applicability of each item in Table 1 on a scale from 0 to 100. Anchor points are: 0 = Never, not at all; 50 = Sometimes, moderately; 100 = Always, perfectly. These anchor points ask the subject to consider jointly both frequency and aptness of the item. Numbers are entered at 10-point intervals and subjects rarely use more than the 10 points suggested. The reasons for using a scale of this form were presented in Benjamin, 1974, p. 399. Items appear in a randomly determined order. Some of the various forms of the questionnaire are presented in Appendix I.

Series A described the interpersonal behavior of a significant

other in terms of the first two surfaces (focus on other and focus on self). An example of focus on other is: "My _____ manages, controls, oversees every aspect of my existence". Here, the person being rated is focusing on another person, namely the rater. There is a transitive verb with the rater as direct object. "My _____ yields, submits, gives in to me" describes the person being rated as focusing on him/herself; there is an intransitive verb with the rater as indirect object. Focus on other has to do with what is to be done to, for or about others. Focus on self has to do with what is being done to, for or about the self.

Series B has the same logical and grammatical structure as Series A except roles are reversed. In other words, in Series B the rater uses an "I" form instead of the "He/She" form of Series A. An example of Series B focus on other is "I manage, control, oversee every aspect of my _____'s existence" and an example of focus on self is "I yield, submit, give in to my _____".

Series A and B should be given together to measure complementarity. The focus on other items from Series A ("My _____ manages, controls, oversees every aspect of my existence") are complemented by the focus on self items from Series B ("I yield, submit, give in to my _____"). The focus on self items from Series A ("My _____ yields, submits, gives in to me") complement the focus on other items from Series B ("I manage, control, oversee every aspect of my _____'s existence").

A summary of the relations between Series A and B is presented in Table 2. References in the table to two-space summaries will be

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Insert Table 2 about here

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explained subsequently in the section headed The Computer Analyses.

Series C measures intrapersonal attitudes described by the third (Introject) surface of the model. This is a measure of how the subject treats him/herself rather than of how he/she relates to others. ("I control, manage myself according to my carefully thought-out goals for myself"). Series C can be rated by the subject him/herself or by someone else judging the subjects' self-concept ("He/she controls, manages him/herself according to his/her carefully thought out goals for him/herself").

In Series D a third party rates the interpersonal postures of a pair for focus on other ("He manages, controls, oversees every aspect of her existence") and focus on self ("He yields, submits, gives in to her"). For any dyad, Series D should be given twice, reversing subject and object the second time ("She manages, controls, oversees every aspect of his existence" and "She yields, submits, gives in to him"). The two administrations of Series D allows a test of complementarity ("He manages, controls, oversees every aspect of his existence" is complemented by "He yields, submits, gives in to her").

Use of two forms of Series D, and use of Series A and B allows unbiased testing of complementarity. For example, a given individual in a given relationship can be dominant or submissive, dominant and submissive, or neither. In a pair both can be dominant, or both can be submissive. This freedom is in significant contrast to other methods such as Leary's (1957) wherein the presumption is, and the scoring assures, that to the extent the subject is not dominant then he/she is submissive.

The standard INTERPERSONAL HISTORY series typically used in the beginning of psychotherapy asks the individual to rate him/herself (Series C), a significant other person such as the spouse (Series A), the self in relation to that significant other person (Series B); mother as remembered from childhood (Series A); self in relation to mother then (Series B); father as remembered from childhood (Series A); self in relation to father then (Series B); mother in relation to father (Series D); father in relation to mother (Series D). In sum, there is an assessment of self, relation with significant other, memory of the relationship with the mother, with the father, and of the modeling that mother and father showed in relation to each other. Variations on this may be made as is clinically appropriate. Stepparents may need to be substituted, or the time period sampled may need altering. If the presenting patient is a child then Series A and B should be applied to that child as seen by each of the parents,

and, if the child is old enough, he/she should rate the parents on the NOW form of Series A, B and D.

The Computer Analyses

There is one standard program (ORD 2) and four optional programs (LAG 2, CORONY, ORD 4, and ORD 5).

ORD 2 (maps, affiliation and autonomy scores)

Maps: The standard program yields output illustrated in Figure 2 which is from some Series C (third surface) ratings of the self.

Insert Figure 2 about here

The output presented in the top half of the figure is from a 30 year old married woman at the beginning of a 10 week brief psychotherapy. The patient set the limit at 10 sessions because that was the period during which she had 100% coverage by health insurance and she was motivated to move as rapidly as possible. Ratings at the bottom half of Figure 2 were made at the end of the 10 week therapy.

Output such as that shown in Figure 2 is named a map. To create maps, the ORD 2 program unscrambles the randomly determined order of the items and prints out the scores assigned to each item at the appropriate places in the model. For example, at the beginning of therapy the patient assigned 90 to the items for chart points labeled guilt, blame, bad self; and doubt, put self down. She gave these same two item ratings of 30 and 20, respectively, at the end of therapy.

In addition, the ORD 2 program determines the median rating for each questionnaire, subject, and relationship and prints out phrases from above-median items at the appropriate place on the model. For example, the score of 90 for the chart points guilt, blame, bad self for the ratings mapped in the top part of Figure 2 was above median; therefore the phrase "guilt, blame, bad self" appears in the corresponding location for that chart point. This procedure allows the relatively more salient points for a given subject in a given relationship to be determined. A glance at the above-median items for the top of Figure 2 shows that at the beginning of therapy, the patient had introjected much hostile power. Inspection of the bottom half of Figure 2 shows that by the end of the brief therapy, she had lessened the degree of self-oppression although much self-restraint remained.

In general above-median endorsements on the affiliative right-hand side of the map (especially Quadrant I) are characteristic of normal subjects whereas above-median endorsement on the disaffiliative side are more characteristic of psychiatric subjects. Average maps for female psychiatric patients are presented in Appendix II.

Under the rationale that the primate has an affiliative (group) adaptation, the finding that normal subjects center on the affiliative pole is expected. The observation that more affiliative items are also more socially desirable confirms the evolutionary principle of survival of the fittest. If the primate needs to bond and cooperate

with other primates to survive, then the ones with the greatest skill at affiliation will survive easiest; it is appropriate that what is adaptive is socially desirable and characteristic of well functioning members (i.e. normals) of the primate troop. Further considerations on the "problem" of social desirability are presented in Benjamin, 1974, and Benjamin, 1976. When all is said and done, the fact remains the SASB is a good-faith test and should be used only with subjects who are trying to be as candid as they can within the limits of normal defensive mechanisms. Motivation should be a desire for self-understanding and therefore if at all possible, subjects should be promised a viewing and explanation of the computer analyses. If this cannot be arranged then there should be ratings of the subject by an informed but objective third party.

The ORD 2 maps for Series A, B and D consist of two (focus on other and focus on self) surfaces for each rating rather than the one (introject) shown for the pre and post Series C ratings presented in Figure 2. The left hand side of Figure 3 presents the ORD 2 output from Subject #362 B9 rating her memory of her mother on Series A and the right-hand side presents the output from the same patient rating her memory of herself in relation to her mother on Series B.

Insert Figure 3 about here

Figure 3 illustrates that when Series A and B are applied by the rater to the same other person, the output yields an analysis of the

rater's view of each focusing on the other and each focusing on the self. To obtain a complete description of a given relationship, both Series A and B should always be administered together. Complementarity, (see Table 2) is indicated by comparing A, focus on other, with B, focus on self; and A, focus on self, with B, focus on other. For example, in Figure 3, the mother had 3 above-median items just on the hostile side of the power pole. Complementarity is suggested by the daughter's above-median items just on the hostile side of the submissive pole. Perceived similarity is established by comparing the same surfaces for Series A and B. Both the daughter and the mother, for example, gave above-median endorsement to refuse assistance, care; sacrifice; appease, scurry. This similarity may be interpreted as a type of identification.

Series A and B measure the perceptions of the rater and may or may not relate to reality. In individual therapy, the reality of childhood experience is ignored under the rationale that it is the perception and memory which affects feelings about the self and relations with significant others. As therapy progresses, this perception of how it was often changes and SASB measures the changes.

In assessing marital or family relationships important in the here and now, a test of reality becomes more relevant. If Series A and B can be rated by both members of the dyad (e.g. daughter and mother; wife and husband), then, in addition to obtaining a complete

description of each individual's phenomonology, there is an opportunity for cross-checking the validity of those respective perceptions. For example, Person #1's description of Person #2's focus on other behavior (from Series A, Person 1) can be compared to Person #2's description of his/her own focus on other behavior (from Series B, Person 2). Further possibilities for such cross-checks are described in the section labeled CORONY. The use of maps to identify discrepancies in perceptions of each other can provide major points of focus in couples and family therapy. Reference to the model can be very useful in identifying misunderstandings, relating them to early history, and in specifying alternative interpersonal postures. Illustrative examples are available elsewhere (Benjamin, 1976).

Details of interpretation of maps such as those shown in Figures 3 and 4 can depend on the theoretical orientation of the clinician. The interpersonal postures presented in the simplified version of the model in Table 1 can be related to different "schools" of therapy such as psychoanalysis, transactional analysis, client-centered therapy, or family therapy (see Benjamin, 1979). In interpreting ORD 2 maps, blocks of above-median items should be noted. For example, in the left-hand side of Figure 3 there is a block of above-median items in the focus on other Quadrant IV (Series A), and these suggest the patient's mother was perceived as having much friendly influence. Above-median items in that quadrant include: Specify what's best, benevolent monitor, remind; pamper, overindulge and so on. If quadrant

names collapse too much information and alternative language is still desired, the interpreter may wish to use the more colloquial and popular terms entered in Figure 4. There, the terms offered

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Insert Figure 4 about here

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to describe the most controlling behaviors in Quadrant IV are: Bossing others, "Jewish momma" and Sugar Daddy. When using the alternative language of Figure 4, the daughter's complementary behaviors shown in Series B are renamed "good girl" and prissy.

Note clusters of above median items and note large blank areas.

Interpretation of maps may consist of noting such clusters of items and summarizing in terms of key words from Table 1, Figure 4 and the output itself. It is important to include every quadrant in order to give a balanced picture. For example, in addition to noting Friendly Influence, the mother described in terms of Figure 3 should also be described in terms of Quadrant I - Encourage Friendly Autonomy. The addition of these behaviors (described in Figure 4 as You're OK, I understand, I hear you, Do your own thing) means that the mother also contributed to the daughter's healthy differentiation and strength. This indeed was the reality as the unusually quick response to treatment demonstrated.

The absence of above-median endorsement is noteworthy too. For example, in Figure 5 the Series A and Series B ratings for

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Insert Figure 5 about here

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the husband of Subject 362 B9 are presented. In contrast to the mother, Quadrant I on the husband's map was relatively empty. He did not listen, communicate understanding or show confirmation of Patient 362 B9. At the same time, Figure 5 shows that he was experienced as punitive and controlling (Quadrant III, focus on other) as well as neglectful and rejecting (Quadrant II, focus on other). He was also personally unavailable (Quadrant II, focus on self). The large blank area on the interdependence side of his focus on self surface suggests he was impervious to her influence except for the points sulk, act put upon and ask, trust, count on. From the patient's point of view he sounded like a difficult preadolescent boy who counted on his wife-mother to "cover his bases" for him. He mostly had a good time playing with his buddies, occasionally would glumly do what he was "supposed" to, and he frequently "blackmailed" his wife (mother) into keeping the supplies coming and holding her tongue. The wife was afraid of his attacks and would do whatever she could to avoid them.

Naturally the therapist requested that the husband be brought in for therapy and the wife tried very hard to get him to do it. He adamantly refused. The therapy then proceded on the assumption that if complementarity flows in two directions, then the wife's resentful submission must be contributing to the husband's hostile control, and her lack of friendly autonomous assertiveness, to his apparent inability to hear and understand her.

Note conspicuous breaks in above-median endorsements.

The self ratings of a 23 year old woman shown in Figure 6

Insert Figure 6 about here

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reveal a marked break around the affiliative and disaffiliative poles. Real warmth has not been introjected (there was none available from her "proper", image-conscious mother) and Subject 316 B9 was perceived as "cold" by her husband who had precipitated a crisis by finding a lover. The lower half of Figure 6 will be discussed in the section headed LAG 2.

Note whether there is balance between interpersonal surfaces.

Above-median focus on other and focus on self items should be about equal in number. In Figure 7 the husband of Patient 316 B9

Insert Figure 7 about here

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described his father more in terms of focus on other (who was the rater), and he described himself more in terms of focus on himself. The father had 21 above-median ratings for items belonging to the focus on other surface (parent prototype) and only 11 on the focus on self surface (child prototype). In accord with the principle of complementarity the subject assigned above-median ratings to 17 items belonging to the focus on self surface (child prototype) and only 6 to the focus on other surface (parent prototype). In other words the father mostly focused on the son, and the son, mostly on himself. Complementarity between father and son was also shown by the fact that the father's above-median endorsements were on the influencing side of the focus on other surface whereas the son's above-median endorsements were on the submissive side of the focus on self surface.

In summary, the father's total control of the relationship is shown by three features: (1) father's heavy focus on son and son's focus on self; (2) father's high ratings on all of the influencing items (lower half of focus on other surface) and son's high ratings of submissive items (lower half of focus on self surface) and (3) the fact that the father himself was essentially uninfluencible. The lower half of this focus on self surface is almost completely blank. The son was learning to focus only on himself, that he should submit extensively and that his father was uninfluencible. This

experience taught him that in relation to father-figures he was ineffective and worthless.

Note weighted affiliation and autonomy scores.

The weighted affiliation and autonomy scores present a summary statement of the basic thrust or orientation of the above-median items in the ORD 2 maps. The weighted affiliation (X) and the weighted autonomy scores (Y) identify a single vector (X, Y) which is affected by the degree of endorsement and by insights assigned according to the theoretical structure of Figure 1.

To illustrate: the (affiliation, autonomy) vector for the mother's focus on other behavior shown in the left-hand side of Figure 3 is (141, -60). This summary score is located in the focus on other Quadrant IV and as such it represents an average position of friendly power. In other words, the mother's focus on other behavior was more friendly than hostile, and more powerful than encouraging of autonomy. The patient's focus on self behavior shown in the right-hand side of Figure 3 has an affiliation, autonomy vector of (98, -58) indicating an average position of friendly submissiveness; this is complementary to the mother's position of friendly influence.

The weights used in computing the weighted affiliation and autonomy scores are given in Figure 8 where it can be seen that

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Insert Figure 8 about here

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items approaching the affiliation pole are given progressively greater positive weights and items approaching the disaffiliative pole are given progressively greater negative weights. The affiliation score is computed by multiplying the endorsement for each item by its weight as assigned in Figure 8. The sum of all 36 products comprises the weighted affiliation score for a given surface. The affiliation score for the mother's focus on other behavior shown in the left-hand side of Figure 3 was computed as follows, starting at the affiliation pole and moving clockwise:

0(+9)	+	90(+8)	+	99(+7)...		+90(0)...		+0(-9)...		+90(+8)
[point 110]		[141]		[142]		[140]		[130]		[point 111].

99 is punched instead of 100 to save space on computer cards. In general, positive affiliation scores indicate friendliness and negative affiliation scores indicate unfriendliness.

The autonomy score is computed by giving maximal positive weights to items at the autonomy pole, and maximal negative weights to items at the dominance-submission pole. Except for the change in weights, the autonomy score is computed exactly as the affiliation score. Each item is multiplied by its assigned weight from Figure 8 and all 36 products for a given surface are summed. Negative autonomy scores indicate dominance if generated from the focus on other surface, and submission if generated from the focus on self surface. Negative autonomy scores from the introject surface indicate introjected control; friendly self-discipline if the affiliation

score is positive, and hostile self-criticism and restraint if the affiliation score is negative. Positive introjected autonomy scores along with positive introjected affiliation scores indicate introjected tolerance of autonomy, a willingness to let oneself be whatever one will be. If introjected affiliation is negative, positive introjected autonomy scores suggest self-neglect.

The affiliation and autonomy scores are useful in providing numbers to characterize maps when contrasting groups, when comparing an individual to various norms, or when tracing changes over time, as in therapy for example.

In Appendix IV some norms for weighted affiliation and autonomy scores from an earlier revision of the questionnaires (the 1976 form) are presented. The data are based on a sample of 48 psychiatric patients (8 males, 40 females), 56 medical students (29 males, 27 females) and some psychology students (N = 36) participating in Interpersonal Learning groups. Norms on a small sample (N = 30) of psychiatric patients taking the 1978 form do not look very different from those presented in Appendix IV. Norms from the 1970 form (67 non-psychiatric persons, 55 psychiatric patients) and from the 1974 form (51 medical students) showed many of the same, but not all of the same trends. Final norms will require much larger samples. Presently massive numbers of ratings are planned as a part of an interpersonal diagnostic project

Colleagues using the 1978 forms, are asked to forward data classified by sex and diagnostic category for possible inclusion in future norms.

In general, Appendix IV shows that medical students are more affiliative than patients in ratings involving self, significant other (and, not shown in the appendix, mother and father). In relation to significant other, both patients and medical students functioned in Quadrant I with patients feeling more controlled by their spouses than medical students. Not shown in Appendix IV are norms to suggest that mothers exerted enough control to average in Quadrant IV for some groups, and all groups reported a Quadrant IV average level of submissiveness in relation to mother. Similar trends were observed for fathers and all groups in relation to fathers.

The table at the end of Appendix IV presents coefficients of internal consistency which will be defined in the section headed Autocorrelation Patterns. On the average the psychiatric samples showed less within-subject internal consistency than medical students.

Developmental norms for affiliation, autonomy and internal consistency scores are presented in Appendix V. These are based on ratings of the 1971 form made by 171 mothers of pediatric outpatients. The rated child was either the oldest (107) or youngest (64) whether or not that was the child who had been brought to the

clinic. Details of the sample and findings are presented in the text of Appendix VI. A repeated measures anova was performed on the norms in Appendix V and the following trends were significant:

Focus on other ratings revealed that children were experienced by mothers as controlling during the first year of life. Children progressively gave more autonomy to mothers as age increased. Focus on other did not reach high levels of internal consistency until age 7-9.

Focus on self became progressively less affiliative as age increased. Since focus on other started at a very low level of internal consistency and progressively increased thereafter, whereas focus on self started and stayed at high levels of internal consistency, the assignment of prototypic names parentlike and childlike for these behaviors, respectively, is supported. Further support is found in the relation of points on the focus on other surface to other studies of parent behavior, and of the focus on self surface to studies of child behavior (see Benjamin, 1974).

Mother's ratings of themselves in relation to the children suggested that mothers were controlling of children during the first year of life and progressively more giving of autonomy as age increased.

Maternal ratings of their own focus on self suggested a peaking of attachment at 12-17 months, an abrupt drop at 18-24 months when

item analyses presented in Appendix VI suggest there was a peaking of hostile autonomy (from the children). Except for the 18-24 month low, affiliation remained high to preadolescence when it dropped some.

Appendix VII presents the details for preparing the data deck to run on ORD 2. The same principles for data preparation apply for all three of the optional programs. ORD 2 may also be run on the PDP 15 computer. In addition to a program which will yield ORD 2 maps and autonomy and affiliation scores, PDP-15 has an option which will allow the user to take the questionnaire directly via the computer and receive immediate output from ORD 2.

LAG (autocorrelation patterns and the coefficient of internal consistency)

High and positive internal consistency: The first optional program, named LAG, produces autocorrelation patterns such as the one shown in Figure 9. Data used for generating Figure 9 were from Subject 362 B9 rating significant other and mapped in Figure 5.

Insert Figure 9 about here

To create the autocorrelation figure, each of the item scores is correlated with the item scores for points one step away according to the model in Figure 1. For example, in rating self focusing

on other (I form, shown in the top right-hand side of Figure 5) the score for "you can do it fine" (= 90 as shown in Figure 5) is correlated with the score for the adjacent chart point, "suggest fair exchange " (= 70 in Figure 5); pairings for adjacent items continue all the way around the surface. Usually the pairing of adjacent points (first lag) yields a high and positive correlation indicating that theoretically similar items actually receive similar degrees of endorsement by a given individual making a specific rating. The second lag correlates data for points which are two steps apart; the third, points 3 steps apart, and so on until lags 17 and 19 which pair nearly opposite points. Lag 35 completes the cycle of 36 points, and amounts to correlating points one step away. (Lags at 9, 18 and 36 are invalid because they involve redundancies. Lags 0 and 36 involve correlating each point with itself and lag 18 has only 18 rather than 35 different pairings of the 36 available points). In the upper right-hand part of Figure 9 the first 17 autocorrelations decrease progressively in size through successive lags. They are in the range of zero when points which are theoretically unrelated are correlated; such points are located at 90 degree angles in the model in Figure 1. In this part of Figure 9 the autocorrelations become highly negative when pairing points which are theoretically opposite; correlations become progressively more positive again as the process continues past opposites to come back to correlate adjacent points. The actual lags 19-35 are mirror

images of lags 1-17 because there are only 17 completely independent sets of pairings possible with 36 points. To avoid giving a false impression of true mirror imaging, the program graphs actual data for odd numbered lags on the right-hand side (lag 1 is printed at 35; lag 3 at 33; lag 5 at 31, etc.) and the even numbered lags on the left-hand side (lag 2 at 2, lag 4 at 4; lag 6 at 6, and so on).

The appearance of the curve in the upper right-hand side of Figure 9 is quite typical of normal populations. In order to create a number summarizing the degree to which a given autocorrelation curve resembles the shape shown in Figure 6, another correlation is computed between the points in this part of Figure 9 and an inverted normal (Z) curve. This number describing the degree of correspondence between the autocorrelation curve and an inverted normal curve has been named the co-efficient of internal consistency (Benjamin, 1974, pages 401-405) and this typically averages close to .90 in normal samples. (See Table IV-1 in Appendix IV).

The interview method with hundreds of subjects has suggested that if an orderly pattern such as that shown in this part of Figure 9 is obtained, the behavior being described is integrated, "together", predictable and stable from day to day. If that pattern is not obtained, the domain of behavior being described is disorganized, not predictable, unstable, chaotic. In other words there is test-retest reliability implied by high internal consistency. Sometimes,

however, subjects (especially patients) obtaining a high coefficient will report they were feeling very "together" the day they took the test, but on another day they would rate it differently. Thus test-retest reliability is suggested but not necessarily implied by high internal consistency.

No internal consistency. When the autocorrelation patterns show "random" scatter, the coefficients will be near zero and this suggests the domain being described is unstable, chaotic, unpredictable.

Negative internal consistency. The left-hand side of Figure 9 presents the autocorrelation curves for Subject 362 B9 rating her husband at the beginning of therapy. These autocorrelations correspond to the ratings mapped on the left-hand side of Figure 5. Inspection of Figure 9 shows that the husband's focus on other behavior toward the patient tended to be more correlated when opposites were being compared (coefficient of consistency = -.326). Adding this to Figure 5(L) it can be seen that he gave her opposing messages: abandon-nurture; force conformity-endorse freedom; specify what's best-uncaringly let go; neglect-stimulate; put down-you can do it fine. Such a degree of contradiction ($P<.05$ for $r = -.326$) is said to represent double-binding behavior when it occurs as it does here on the focus on other surface. Inspection of the lower right-hand part of Figure 9 shows that the patient tended to complement

the perceived double-binding with ambivalence. Her focus on self behaviors (I form) were complementary to his focus on other behaviors (He form) in that they had a slight (but not significant) tendency to form the inverted-U characterizing ambivalence when occurring on the focus on self surface ($r = -.098$).

Comparing consistency between surfaces

The contrast between the patient's own focus on other (I form) and her focus on self (I form) shown in the top and bottom of the right hand side of Figure 9 is informative. As is true of many helping professionals (the patient had a high position in the medical hierarchy), focus on other behaviors are affiliative and integrated. Focus on self, however, was much less well-defined, even "disintegrated", if not ambivalent. In clinical terms, such persons are comfortable when initiating and doing to and for others, but not when accepting and reacting to what's being done to and for them. Similarly, the model allows for differential degrees of functioning in different relationships. It is not uncommon to observe that persons can function very well with colleagues at work, both in terms of stability and friendliness but not so well in relation to significant other or in relation to a specific child. Sometimes the opposite is observed; functioning is poor at work, but good at home. The SASB model is incompatible with the notion of mental illness as a total breakdown of mental apparatus; it is supportive of an interpretation of

social functioning which holds that in specific situations, maladaptive patterns have developed through an interaction of learned and "organic" factors. The relation between genetics and environment is presumed to be complex and includes factors associated with history of the species, of the family, and of the individual. Both biochemical and social interventions can be appropriate to the specific behavioral malfunction.

Relating consistency to affiliation and autonomy

Consistency and stability as reflected by a high coefficient of internal consistency should not automatically be interpreted as "good". The coefficient of consistency must be interpreted in conjunction with the maps. For example, it is possible to be consistently organized around self-destruction. The coefficient of internal consistency for introject ratings by persons who have committed suicide subsequent to routine taking this test on clinic intake have consistently been high and oriented around the disaffiliative pole. Similarly, high coefficients of internal consistency are obtained for relationships with others which are relentlessly hostile and destructive. The problem child discussed in Benjamin, 1976 is an example of the latter.

Relating consistency to "gaps" in the map

The autocorrelations shown in the lower half of Figure 6 tended to increase as points located on the model at 90 degree angles were correlated. These "right-angle" correlations are found whenever

there are 5 or 6 point "gaps" in the map as there are around the affiliative and disaffiliative poles of Figure 6. Such conspicuous gaps can represent a region of high conflict; in the case of Subject 316 B9 shown in Figure 6, the conflicts suggested by gaps had to do with sexuality and aggression.

CORONY

Optional program CORONY can compute product moment rs among all the surfaces for all the ratings of both members of a dyad. For example, for the 9 ratings of the standard interpersonal history, CORONY assigns variable names to successive surfaces of Figure 1 involved in these standard ratings:

1 = Self - Introject

2 = Significant Other focuses on me

3 = Significant Other focuses on him/herself

4 = I focus on Significant Other

5 = I focus on myself when relating to my significant other

6 = Mother focused on me

7 = Mother focused on herself

8 = I focused on mother

9 = I focused on myself when relating to mother

10 = Mother focused on father

11 = Mother focused on herself in relation to father

12 = Father focused on mother

13 = Father focused on himself in relation to mother

If each member of a dyad rates the entire series, CORONY assigns the variable names 14 to 26 to parallel variables 1 to 13 for the first person.

CORONY then allows tests and allows demonstrations of (1) perceived complementarity within subjects (e.g. whether husband's view of his focus on self behavior is complementary to his view of his wife's focus on other behavior); (2) perceived complementarity between subjects (e.g. whether the husband's view of his focus on self behavior is complementary to his wife's view of her focus on other behavior); and (3) between-subject validation of self-descriptions (e.g. husband's view of his focus on self behavior compared to wife's view of his focus on self behavior).

A few product-moment rs representing contrasts 1-3 using the

Insert Table 3 about here

1974 forms are included in Table 3. Inspection of the sample entries suggests that normal couples validate each other's self-descriptions with average rs ranging from .81 to .87 for the various possible comparisons. Psychiatric couples, by contrast show average r ranging from .53 to .61, suggesting greater discrepancy between self and other descriptions. Similarly, perceived complementarity is much less for psychiatric couples than for normals. (Within subject average

r ranged from .27 to .45 for psychiatrics, and .66 to .75 for normals. Between subject perceived complementarity ranged from .28 to .47 for psychiatrics and .69 to .72 for normals).

The contrasts suggested in table need not be confined to product-moment rs. Affiliation and autonomy scores can also be compared for perceived complementarity within and between subjects. For example, Brakarsh (1979) is using the contrasts outlined in Table 3 to compare autonomy scores of partners in "liberated" marriages with those of partners in "traditional" marriages. One expectation is that husbands in traditional marriages will show greater endorsement of power (negative parentlike autonomy scores for variable 3, confirmed by variable 19) and wives will show greater endorsement of submissiveness (more negative childlike autonomy scores for variable 22, confirmed by variable 3).

ORD 4:

Two-space summary for each subject

The third optional program, ORD 4, yields a single figure summarizing all of a given subject's interpersonal history ratings in terms of the 9 respective sets of (affiliation, autonomy) vectors.

Figure 10 presents the ORD 4 2-space summary of the interpersonal history of patient 362 B9 discussed in connection with Figures 2,

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Insert Figure 10 about here

---

3 and 5. In Figure 10 (affiliation, autonomy) vectors are presented according to the key in Table 2. Focus on other ratings are dark circles and focus on self ratings are open circles. Lines are drawn between complementary pairs of ratings as defined in Table 2. The two theoretically complementary vectors between mother and child described above are shown in the lower right-hand corner of the figure, and the actual complementarity is apparent.

A comparison of the Self-pre with the Self-post vectors show that the patient became more friendly toward herself and less controlling or managing of herself. (The post ratings were added since ORD 4 plots only one complete set).

The changes in relation to her husband are shown by comparing Significant Other-pre with Significant Other-post. The map in Figure 5 suggested the patient's husband initially exerted friendly and hostile control but was also quite rejecting. Figure 10 indicates that at the beginning of therapy the average direction of his focus on her was in Quadrant II, invoke hostile autonomy. Figure 5 also suggested the patient complemented her husband by being submissive and withdrawn. Figure 9 shows the average direction of her focus on self was Quadrant II, friendly submission. In Figure 10 it can be seen that by the end of therapy, the patient's average focus on self was more independent and friendlier and that the husband's complementary focus on her had become friendlier and less

controlling. (See Appendix III) Through an understanding of the model and inspection of the maps, the patient saw that her resentful suffering may have been helping to maintain the abusive treatment. When she became more assertive (not attacking) in the ways described by points in Quadrant I, her husband said he "enjoyed her more lately" and began to initiate more friendly contacts.

Clinical summaries from ORD 4

Each ORD 4 profile can show unique trends and the differences correspond in a straight-forward manner to the uniqueness of the clinical picture. The first three available ORD 4 profiles for the 1976 forms are presented in Figures 11, 12 and 13. A scan of subjects 302 B9, 304 B9 and 311 B9 reveals salient dynamics. S 302 (Figure 11) was submitting to hostile control by her husband; when

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Insert Figures 11, 12 and 13 about here

---

focus switched to him, it is clear he took and she encouraged a hostile withdrawal. This Quadrant II behavior relates to the fact that the couple was well into the process of divorce precipitated by his attending an encounter seminar sponsored by his business; while there, he decided he was wasting his life with his wife of 20 years, and hence the divorce.

S 304 (Figure 12) saw every relationship in the light of extreme (and ungenuine) affection. The power dimension was where her sensitivities lay: Her parents were very controlling and she, submissive. Her mother controlled her father and the way her father focused on her mother was exactly paralleled by the way her husband focused on her. S 304 was the mother of a patient and her concern was that the patient was not "a good daughter", i.e. was not submissive. Otherwise, everything was "very good".

S 311 (Figure 13) had had very poor self esteem directly associated with verbal and physical attacks from her mother. The mother, in turn, was subject to chronic hostile put-downs from the father who nevertheless treated his daughter quite well. S 311's self-esteem had a positive base in the father's kindness and was much improved by an intense, genuinely friendly relationship with her significant other. S 311 attempted to exert benevolent control over her significant other but was unsuccessful in this.

Summary of findings from ORD 4

In general, (1) normal subjects show greater complementarity (less discrepancy) and tend to center most relationships near the autonomous side of affiliative pole. (2) Psychiatric subjects show much greater discrepancies in complementarity and the specific nature of the discrepancies is clinically significant. (3) Psychiatric subjects tend to show more disaffiliation, more concern with dominance-submission and/or more hostile withdrawal than normal subjects.

A number to measure deviation from complementarity

In order to test statements about the magnitude of discrepancy in complementarity, program ORD 4 uses the Pythagorean Theorem to generate numbers representing the distances between complementary points as shown in Figures 10, 11, 12 and 13. For Figure 10 the Pythagorean Theorem specifies that the distance between the husband's focus on other vector (-4, 7) and the patient's childlike vector (21, -15) is equal to the square root of $[(-4 -21)^2 + (7 + 15)^2] = 33.66$. More generally speaking, the discrepancy is the hypotenuse of a triangle with one leg specified by the difference between the affiliation scores of the two vectors. The Pythagorean Theorem specifies that these distances first be squared, added and then that the square root of the total be taken. In Figure 9, the distance between the husband's focus on other vector and the patient's focus on self vector was 33.66; the distance between the patient's focus on other vector and the husband's focus on self was 112.15. The average of these two was 72.9.

Table 4 presents the average of such average within-subject discrepancies in complementarity for the categories: significant other,

---

Insert Table 4 about here

---

mother, father and parents in relation to each other. Data are from

the 1974 forms. A psychiatric sample is compared to a sample of medical students by a t test and the differences are significant at the .01 level for the categories: relations with significant other, relations with mother, and parents relating to each other. If this trend is confirmed, it would suggest that complementarity in marriage is more affected by the relationship observed by the child than by the child's own direct experiences with the respective parents. Analysis of the 1976 forms is forthcoming.

A number to measure deviation from identification

Identification Ds are also computed by using the Pythagorean Theorem. These compute the distance between the (affiliation, autonomy) vector of a given self-description and the (affiliation, autonomy) vector of the rater's description for someone else for comparable focus. An example of identification D is: patient's rating of her own focus on other behavior in relation to her mother (I focus on mother) compared to patient's rating of her mother's focus on other (mother focuses on me) behavior.

In general identification Ds are slightly larger than complementary Ds indicating complementarity is greater than similarity; in addition, identification Ds are much less for normals than for psychiatrics, indicating normals perceive themselves as being more similar to family than psychiatrics.

In Appendix VIII there is a key for interpreting ORD 4 output in terms of the various complementarity and identification discrepancies.

ORD 5:

To test the significance of complementarity within an individual's profile, ORD 5 computes Kendall's Tau between the ranks of each pair of complementary ratings for each dimension. For example, Subject #362 B9 shown in Figure 10 demonstrated clear complementarity in the autonomy dimension. This is tested by rank ordering all the darkened symbols (indicating focus on other) on the autonomy dimension. Next the complementary open symbols (indicating focus on self) are rank ordered on the same dimension. Kendall's Tau is .79, $p < .001$ indicating that the most controlling relationships elicited the most submissiveness. When this procedure is replicated for Subject 362 B9 on the Affiliative dimension, Tau is only .43 ($p < .09$) suggesting that there was less complementarity on this dimension for this subject. Subjects (e.g. Figure 13) often do show significant complementarity on the affiliative dimension instead of or in addition to the autonomy dimension.

Conclusion

This paper is confined to description of the questionnaire measures along with preliminary normative data intended to orient the user of the questionnaires to possibilities for interpreting

NOTE: Table 1, "Questionnaire Items and Simplified Version of SASB," © 1979, William Alanson White Psychiatric Foundation, is copyrighted and not available for reproduction.

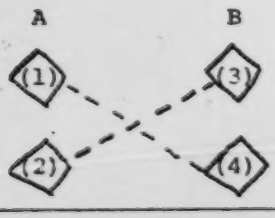
Table 2

Plotting a 2-Space Summary of SASB Questionnaires
(X,Y) as in plane geometry where
Weighted affiliation score = Y
Weighted autonomy score = Y

Series A	Series B
Rater looks at someone else (He/She)	Rater looks at him/herself (I)
(1) Focus on Other Involves doing something to, for or about others Transitive verb with other as the direct object Example: "He controls me" Prototype: Parentlike	(3) Same as (1) except is worded in "I" form Example: "I control him"
(2) Focus on Self Involves what the self is doing or what is being done to for or about the self. Intransitive verb with other as the indirect object Example: "He gives in to me" Prototype: Childlike	(4) Same as (2) except is worded in "I" form. Example: "I give in to him"

COMPLEMENTARY RELATIONS: (1) and (4) Label "Other focuses on me"

(3) and (2) Label "I focus on other"



Series C
Rated by self: Rater looks at his/her own introjections "I control myself"
Rated by other: Someone else looks at subject's introjections. "He controls himself".
Introjects are not plotted as complementary to other surfaces.

Table 3

CORONY VARIABLE NAMES			HUSBAND		WIFE	
	SERIES A - S RATES OTHER (He/She)					
		Focus on Other	2		19	
		Focus on Self	3		20	
	SERIES B - S RATES SELF RE OTHER (I)					
		Focus on Other	4		21	
		Focus on Self	5		22	
			VARIABLE	$\bar{X}$	VARIABLE	$\bar{X}$
(1) TESTING WITHIN SUBJECT COMPLEMENTARITY	PSYCH	Focus on Other	2,5	$\bar{X}$=42 67,37,24,27,26,63,50	19,22	$\bar{X}$=30 02,47,21,-32,50,68,53
		Focus on Self	3,4	$\bar{X}$=27 59,07,34,0,-01,58,29	20,21	$\bar{X}$=45 62,42,13,28,53,70,47
	NORM	Focus on Other	2,5	$\bar{X}$=75 73,83,70	19,22	$\bar{X}$=66 69,79,51
		Focus on Self	3,4	$\bar{X}$=71 85,82,46	20,21	$\bar{X}$=71 58,82,73
(2) TESTING BETWEEN-S PERCEIVED COMPLEMENTARITY	PSYCH	Focus on Other	2,22	$\bar{X}$=37 38,42,27,06,49,44,54	19,5	$\bar{X}$=28 24,18,23,-22,35,74,45
		Focus on Self	3,21	$\bar{X}$=47 74,31,41,-16,58,73,60	20,4	$\bar{X}$=30 46,34,14,08,04,74,29
	NORM	Focus on Other	2,22	$\bar{X}$=72 59,86,70	19,5	$\bar{X}$=70 81,77,51
		Focus on Self	3,21	$\bar{X}$=71 60,79,73	20,4	$\bar{X}$=69 77,83,46
(3) TESTING BETWEEN-S VALIDATION OF SELF PERCEPTION	PSYCH	Focus on Other	4,19	$\bar{X}$=53 63,45,43,41,42,76,63	21,2	$\bar{X}$=60 72,57,30,55,70,52,85
		Focus on Self	5,20	$\bar{X}$=61 75,61,49,62,30,89,59	22,5	$\bar{X}$=53 71,53,40,24,69,43,73
	NORM	Focus on Other	4,19	$\bar{X}$=84 96,89,67	21,2	$\bar{X}$=87 78,93,89
		Focus on Self	5,20	$\bar{X}$=84 92,85,74	22,3	$\bar{X}$=81 81,86,77

Table 4

AVERAGE WITHIN-SUBJECT DISCREPANCY IN COMPLEMENTARITY

	PSYCHIATRIC (N=48)	MEDICAL STUDENTS (N=55)
SIGNIFICANT OTHER	63.40	33.84 **
MOTHER (M)	64.12	51.84 *
FATHER (F)	46.86	43.27
MODELS (M, F)	75.42	53.58 **

*p<.05; **p<.01

Figure Legends

Figure 1 - The SASB model. The first surface describes focus on other; the second, focus on self; and the third describes the results of turning focus on other toward the self. The horizontal axes describe degrees of affiliation and the vertical axes, degrees of interdependence. The model describes and prescribes opposites, complements and antitheses. From "Structural Analysis of Differentiation Failure", Psychiatry, Journal for the Study of Interpersonal Process. Copyright 1979 by the William Alanson White Psychiatric Foundation. Reprinted by permission.

Figure 2 - Maps of Subject 362 B9's ratings of her introject before and after a 10-week brief psychotherapy. Note she becomes less self-restricting and friendlier.

Figure 3 - Maps of Subject 362 B9's ratings of her mother (both types of focus) and of herself in relation to her mother (both types of focus). Note the mother was quite controlling, and the patient, submissive.

Figure 4 - A "pop" form of the SASB model. This can be used to interpret ORD 2 output to patients in less formal language, if desired.

Figure 5 - Maps of Subject 362 B9's husband (both types of focus) and of herself in relation to him (both types of focus). Note that she saw him as quite controlling, rejecting and withdrawn whereas she was submissive and withdrawn. She also was very friendly and "together" when focusing on him.

Figure 6 - Map and test of internal consistency for introject ratings of Subject 316 B9. Note the conspicuous gaps around the affiliative and disaffiliative poles.

Figure 7 - Maps of Subject 316 A9 (who was husband of 316 B9) rating his father (both types of focus) and himself in relation to his father (both types of focus). Note the father focused mostly on other and Subject 316 A9 complemented this with focus mostly on himself.

Figure 8 - The weights used in computing the affiliation and autonomy scores in ORD 2. Affiliation weights are maximal around the affiliative pole and minimal around the disaffiliative pole. Autonomy weights are maximal around the autonomy pole and minimal around the interdependence pole.

Figure 9 - LAG output testing the internal consistency of the ratings mapped in Figure 5. Note that Subject 362 B9 was [illegible] integrated when focusing on her husband but not when focusing on herself. Note too that the husband was perceived as double-binding, i.e. giving contradictory interpersonal messages (coefficient of internal consistency = -.326).

Figure 10 - ORD 4 summary of Subject 362 B9's interpersonal history with measures of complementarity (theoretically complementary domains have similar symbols and are connected by a line). Note that her husband became less controlling and more friendly over the ten weeks of therapy even though he refused to participate in therapy.

Figure 11 - ORD 4 summary of Subject 302 B9's interpersonal history. Note that her husband exerted about as much power as her mother but was much less friendly at the time the ratings were made.

Figure 12 - ORD 4 summary of Subject 304 B9's Interpersonal History. Note that she reports extreme friendliness in every rating. Relationships are differentiated only on the power dimension.

NOTE: Figure 1, "Structural Analysis of Social Behavior (SASB)", c 1979, William Alanson White Psychiatric Foundation, is copyrighted and not available for reproduction.

Figure 13 - ORD 4 summary of Subject 311 B9's interpersonal history. Note that the mother's attack was almost exactly counterbalanced by Subject 311 B9's second spounse's affiliation, and this was reflected in a (newly formed) positive self-concept. Subject 311 B9 was no longer a patient and had divorced a spouse who was similar to her mother.

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PERSON RATES SELF-SERIES C BEGINNING OF THERAPY

FIGURE 2

36289
THE SCORE 50 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH 60.

```
                                        0*  20
                                    10* * *  50
                                40*     *    *  60 LET SELF DO IT,CONFIDEN
                  FANTASY,DREAM     70*     *    *  30
                                  20*       *      *  50
                                0*          *        *  70 INTFGRATED,SOLID CORE
                             10*            *          *  80 PLEASED WITH SELF
                           30*              *            *  20
                         10*                *              *  50
                       0* * * * * * * * * * * * * * * * * * *  30
                         0*                 *                *  60 SEEK BEST FOR SELF
  DRAIN, OVERBURDEN SELF   70*              *              *  40
    VENGEFUL SELF PUNISH     70*            *            *  60 PROTECT SELF
                               50*          *          *  80 EXAMINE,ANALYSE SELF
       GUILT, BLAME, BAD SELF    90*        *        *  90 PRACTICE,BE ACCOMPLISHE
         DOUBT, PUT SELF DOWN      90*      *      *  20
           RESTRAIN, HOLD SELF BACK  90*    *    *  80 BENEVOLENT EYE ON SELF
             FORCE PROPRIETY           90* * *  90 FORCE SPECIFIED IDENTIT
               CONTROL, MANAGE SELF      90*
```

WEIGHTED AFFILIATION SCORE = 42.
WEIGHTED AUTONOMY SCORE = -88.

PERSON RATES SELF. AFTER 10 SESSIONS

36205
THE SCORE 50 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH 60.

```
                                        0*  30
                                    10* * *  80 LET POTENTIAL UNFOLD
                                30*     *    *  80 LET SELF DO IT,CONFIDEN
                              30*       *      *  80 BALANCED SELF ACCEPTANC
                            20*         *        *  50
                          0*            *          *  80 INTEGRATED,SOLID CORE
                        10*             *            *  70 PLEASED WITH SELF
                      10*               *              *  50
                    0*                  *                *  70 ENTERTAIN,ENJOY SEL
                  0* * * * * * * * * * * * * * * * * * * *  70 LOVE,CHERISH SELF
                    0*                  *                *  50
                    50*                 *              *  60 NURTURE,RESTORE SELF
                      40*               *            *  80 PROTECT SELF
                        10*             *          *  80 EXAMINE,ANALYSE SELF
                          30*           *        *  80 PRACTICE,BE ACCOMPLISHE
                            20*         *      *  40
          RESTRAIN, HOLD SELF BACK  60*     *    *  80 BENEVOLENT EYE ON SELF
            FORCE PROPRIETY           70* * *  60 FORCE SPECIFIED IDENTIT
              CONTROL, MANAGE SELF      80*
```

WEIGHTED AFFILIATION SCORE = 112.
WEIGHTED AUTONOMY SCORE = -31.

Figure 2 - Maps of Subject 362 B9's ratings of her introject before and after a 10-week brief psychotherapy. Note she becomes less self-restricting and friendlier.

FIGURE 3

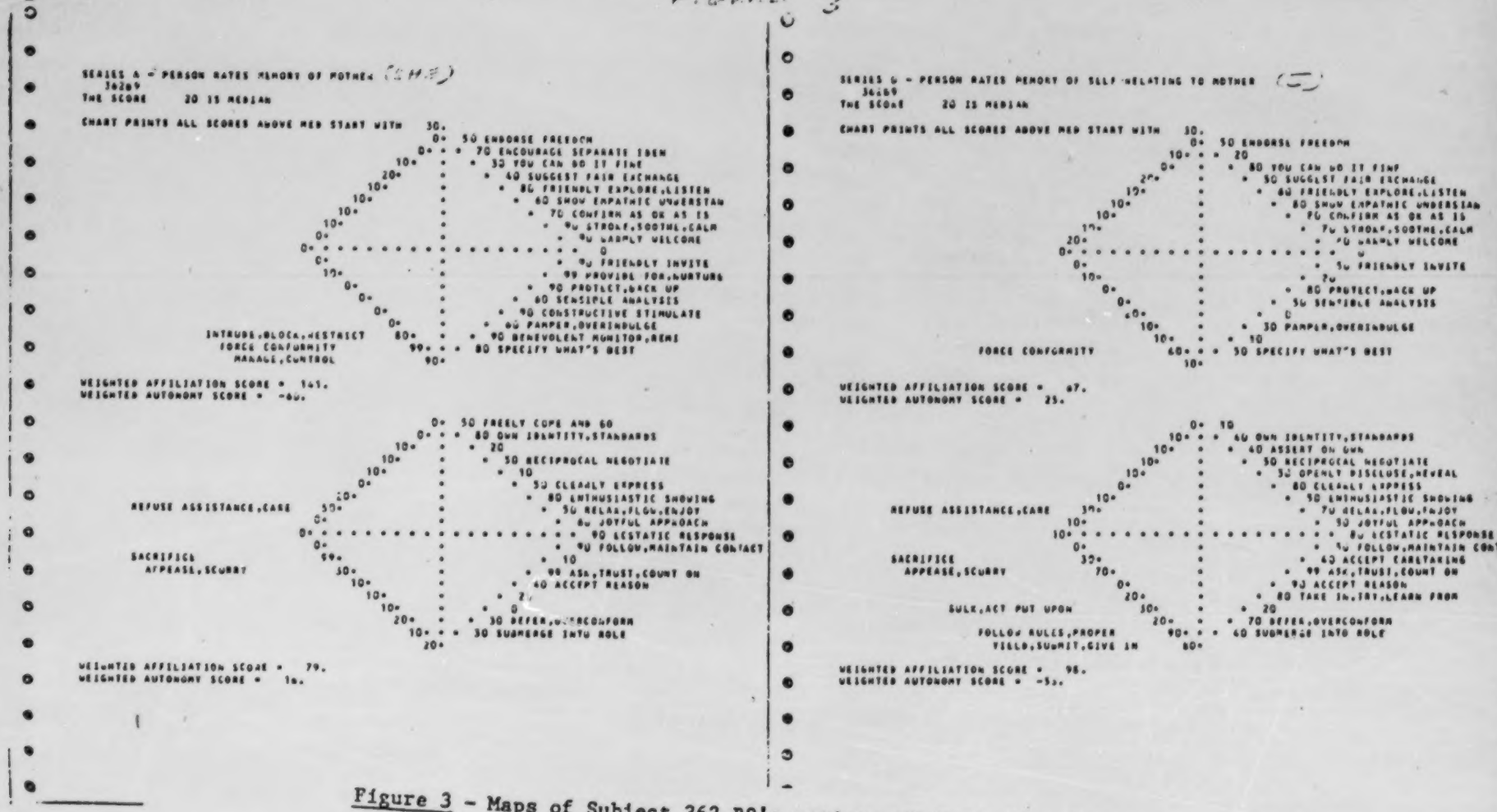
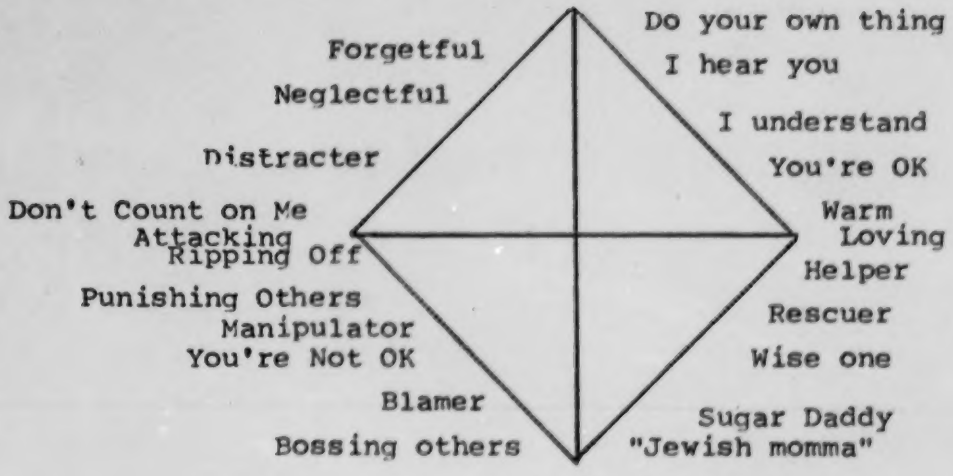
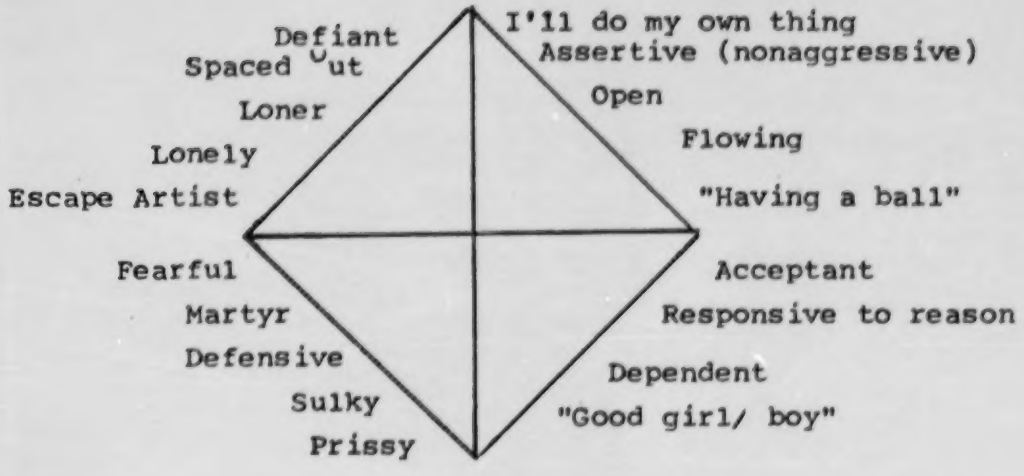


Figure 3 - Maps of Subject 362 B9's ratings of her mother (both types of focus) and of herself in relation to her mother (both types of focus). Note the mother was quite controlling, and the patient, submissive.

FIGURE 4

SASB Description of "Common" Roles, agendas, scripts





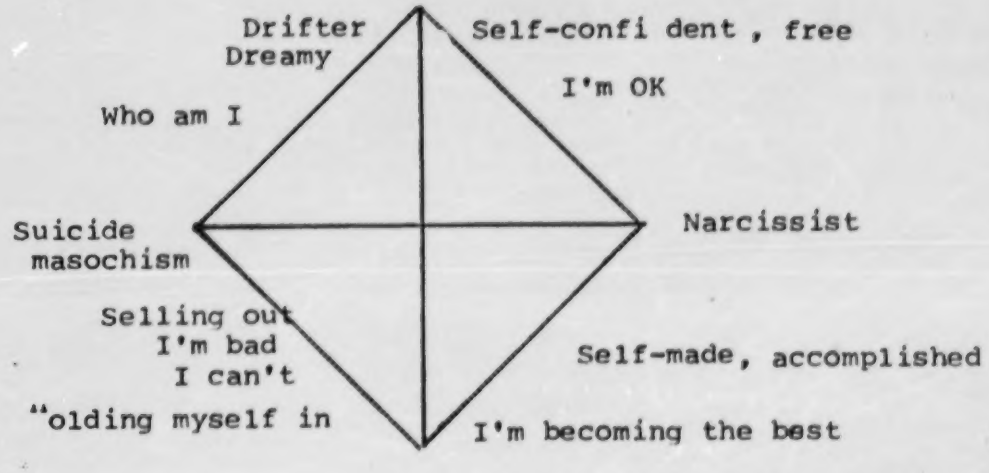


Figure 4 - A "pop" form of the SASB model. This can be used to interpret ORD 2 output to patients in less formal language, if desired.

FIGURE 5

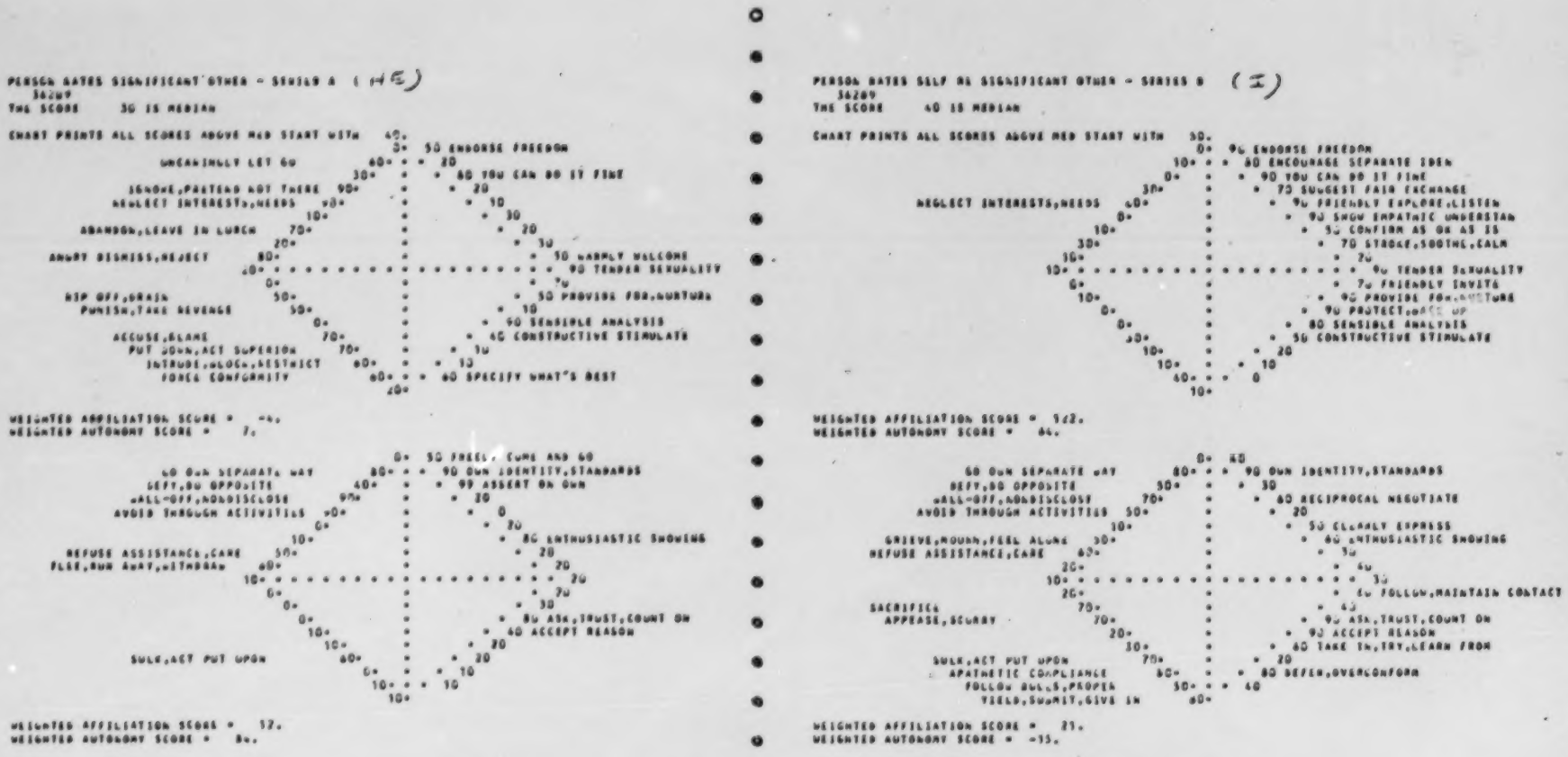


Figure 5 - Maps of Subject 362 B9's husband (both types of focus) and of herself in relation to him (both types of focus). Note that she saw him as quite controlling, rejecting and withdrawn whereas she was submissive and withdrawn. She also was very friendly and "together" when focusing on him.

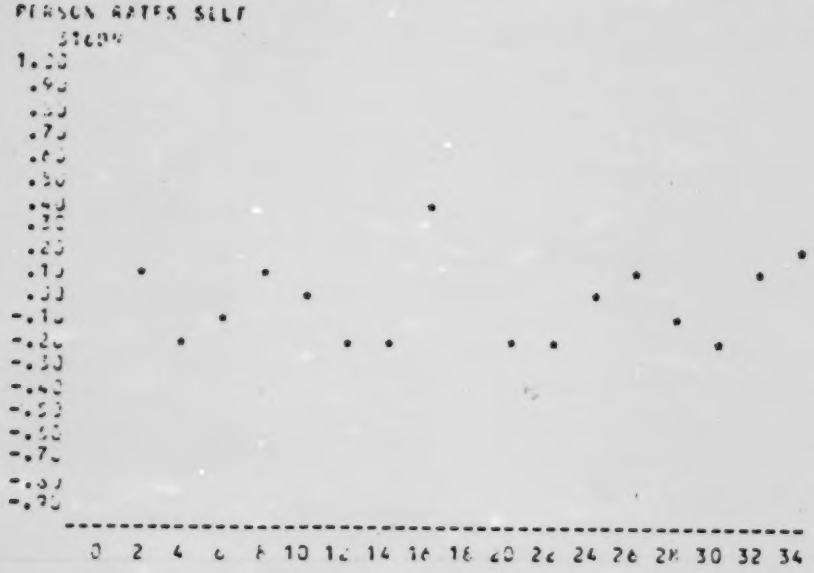
FIGURE 6

PERSON RATES SELF
31689
THE SCORE 30 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH 40.

```
                                        0*  10
                                      10*  *  *  60 LET POTENTIAL UNFOLD
                NEGLECT OPTIONS     60*     *     *  40 LET SELF DO IT,CONFIDEN
                                    20*        *     *  50 BALANCED SELF ACCEPTANC
          NEGLECT OWN POTENTIAL     40*           *     *  40 EXPLORE,HONOR INNER SEL
        UNDEFINED,UNKNOWN SELF      70*              *     *  40 INTEGRATED,SOLID CORE
                                  10*                 *        *  30
                                 10*                  *        *  30
                                  0*                  *        *  30
                                 0* * * * * * * * * * * * * * * * * * * * 0
                                  0*                  *        *  30
      DRAIN, OVERBURDEN SELF      40*                 *        *  30
                                  10*                 *        *  60 PROTECT SELF
          DECEIVE, DIVERT SELF    60*                 *        *  70 EXAMINE,ANALYSE SELF
                                  20*                 *        *  50 PRACTICE,BE ACCOMPLISHE
              DOUBT, PUT SELF DOWN  80*               *        *  50 SELF PAMPER,INDULGE
                RESTRAIN, HOLD SELF BACK  60*         *     *  20
                                        20*  *  *  50 FORCE SPECIFIED IDENTIT
                                        20*
```

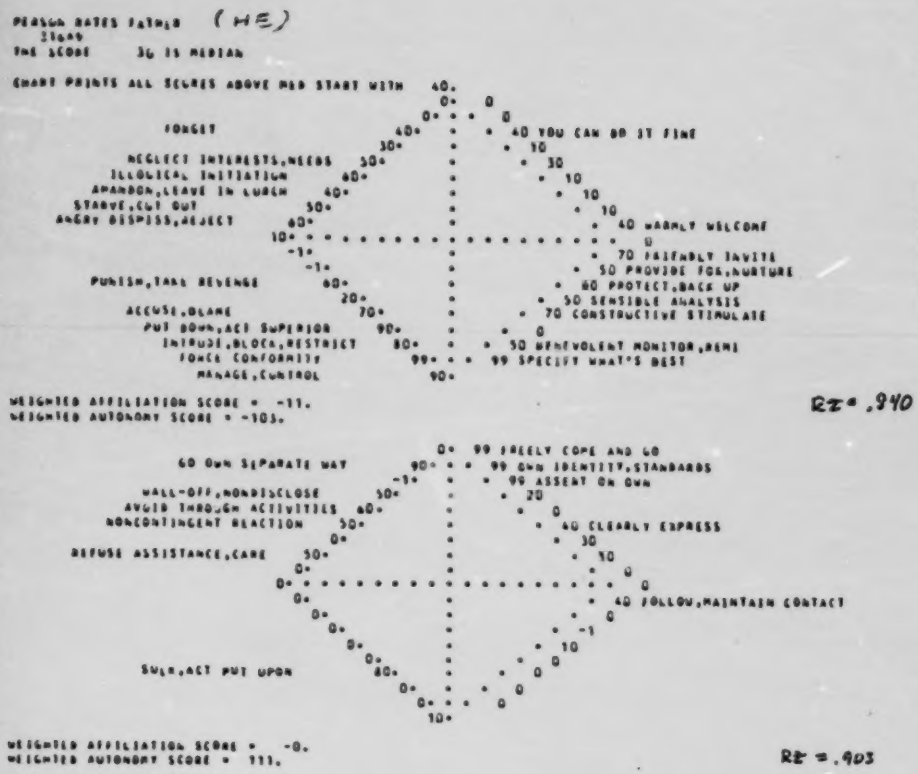
WEIGHTED AFFILIATION SCORE = 26.
WEIGHTED AUTONOMY SCORE = -14.



100 14 15 1-24-28 -4-10 13 4 12 0-22-27-22-27 4 31 0 31 4-27-22-27-22 0 12 9 13-10 -4-28-24 1 15 14
CORRELATION BETWEEN LAG CURVE AND Y CURVE = .099

Figure 6 - Map and test of internal consistency for introject ratings of Subject 316 B9. Note the conspicuous gaps around the affiliative and disaffiliative poles.

FIGURE 7



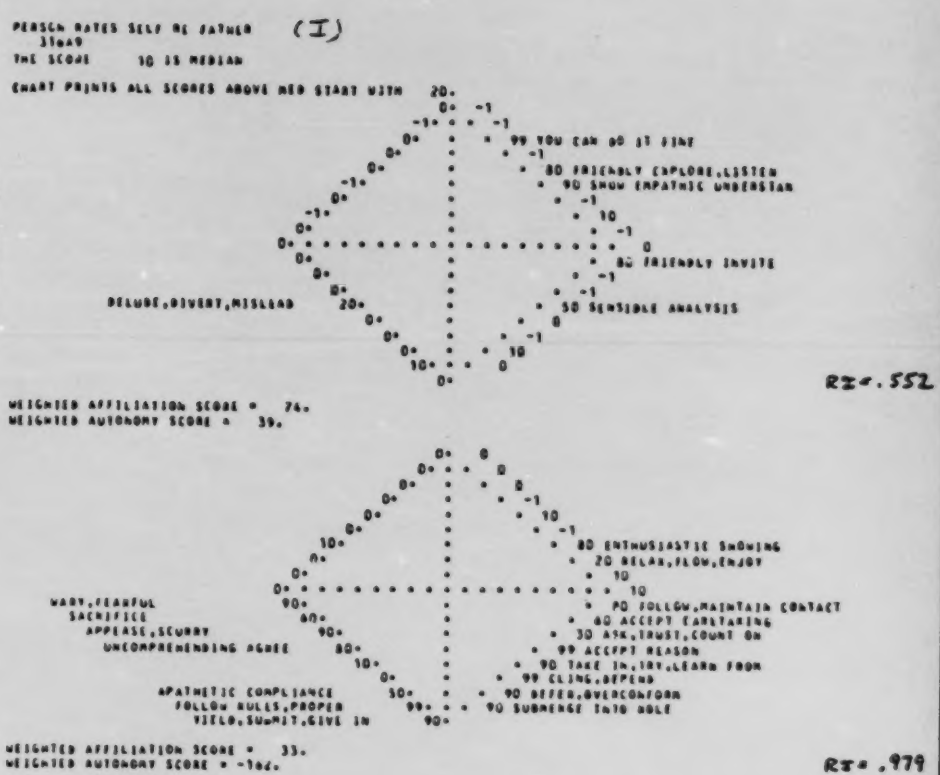

PERSON RATES SELF RE FATHER (I)
316A9
THE SCORE 10 IS MEDIAN
CHART PRINTS ALL SCORES ABOVE MED START WITH 20.
99 YOU CAN DO IT FINE
80 FRIENDLY EXPLORE,LISTEN
90 SHOW EMPATHIC UNDERSTAN
80 FRIENDLY INVITE
DELUDE,DIVERT,MISLEAD
50 SENSIBLE ANALYSIS
WEIGHTED AFFILIATION SCORE = 74.
WEIGHTED AUTONOMY SCORE = 39.
RI = .552

Figure 7 - Maps of Subject 316 A9 (who was husband of 316 B9) rating his father (both types of focus) and himself in relation to his father (both types of focus). Note the father focused mostly on other and Subject 316 A9 complemented this with focus mostly on himself.

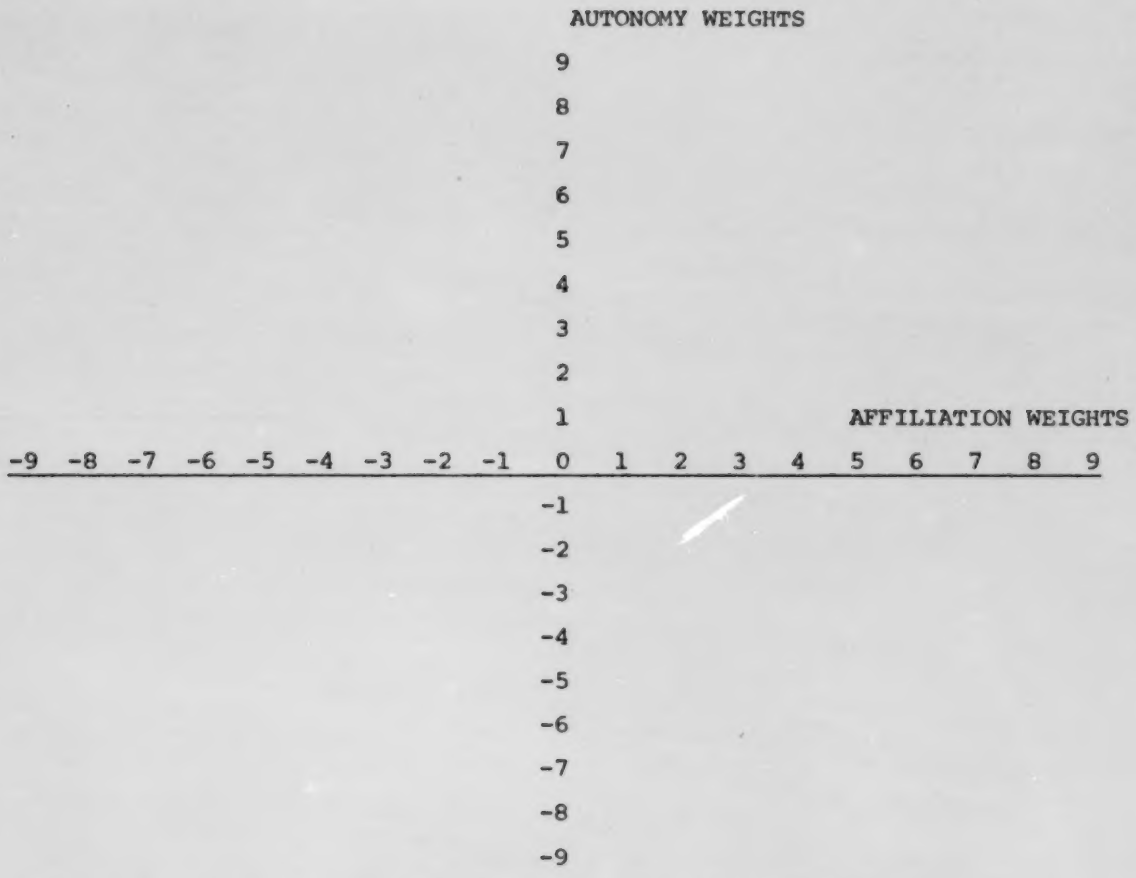


Figure 8 - The weights used in computing the affiliation and autonomy scores in ORD 2. Affiliation weights are maximal around the affiliative pole and minimal around the disaffiliative pole. Autonomy weights are maximal around the autonomy pole and minimal around the interdependence pole.

FIGURE 9

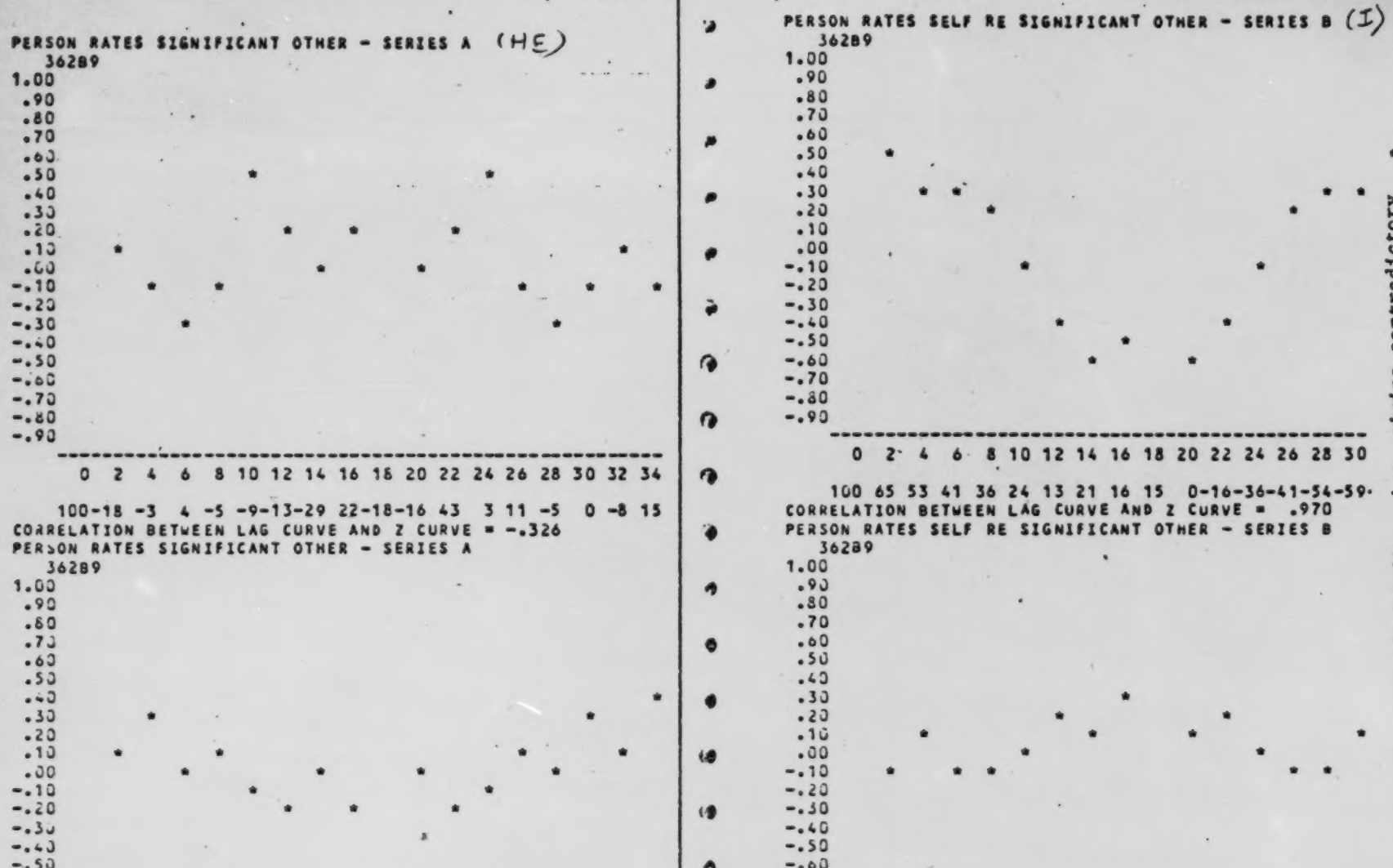
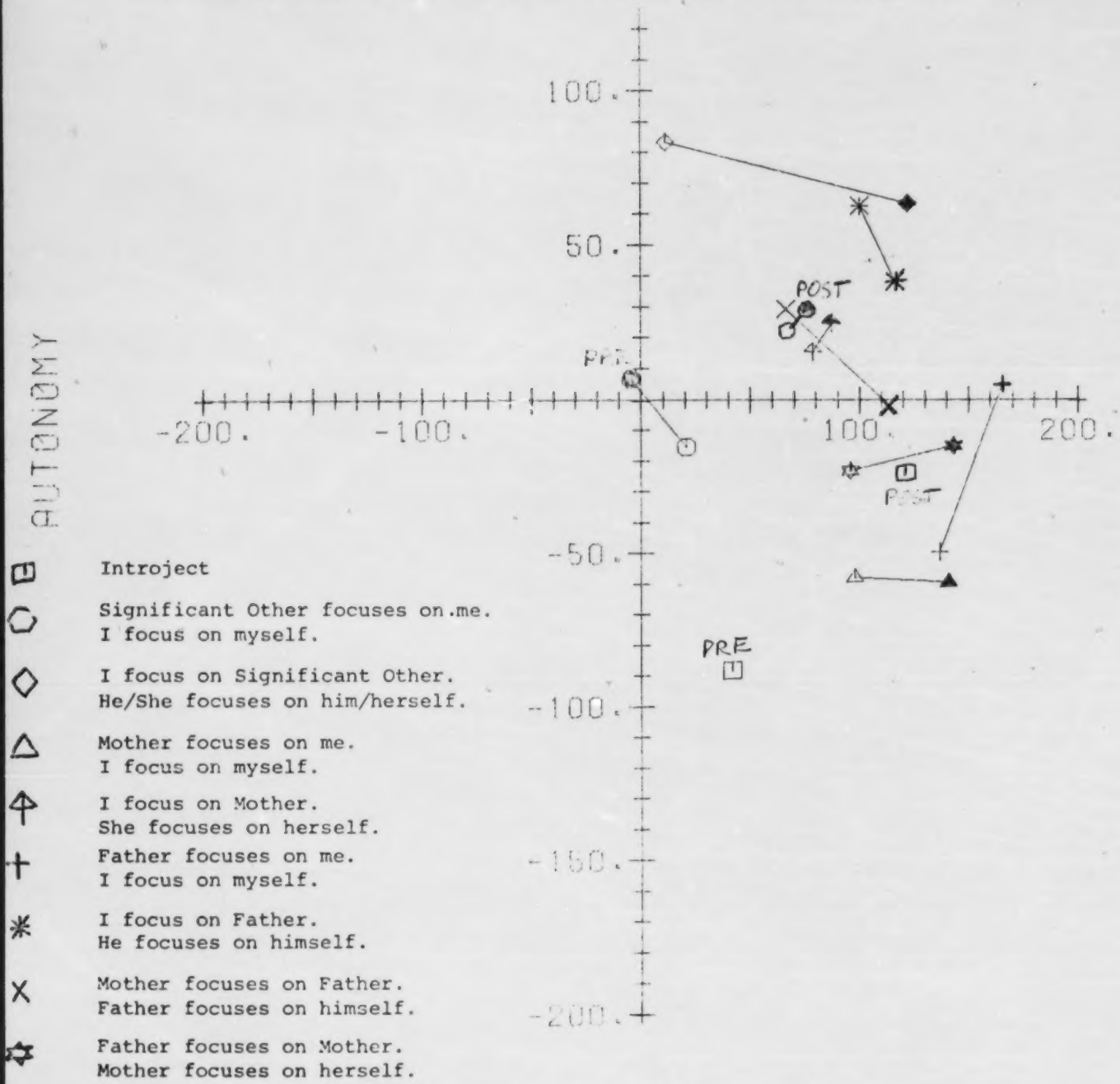


Figure 9 - LAG output testing the internal consistency of the ratings mapped in Figure 5. Note that Subject 362 B9 was very integrated when focusing on her husband but not when focusing on herself. Note too that the husband was perceived as double-binding, i.e. giving contradictory interpersonal messages (coefficient of internal consistency = -.326).

SUMMARY OF COMPLEMENTARY RELATIONS

Figure 10 - ORD 4 summary of Subject 362 B9's interpersonal history with measures of complementarity (theoretically complementary domains have similar symbols and are connected by a line). Note that her husband became less controlling and more friendly over the ten weeks of therapy even though he refused to participate in therapy.



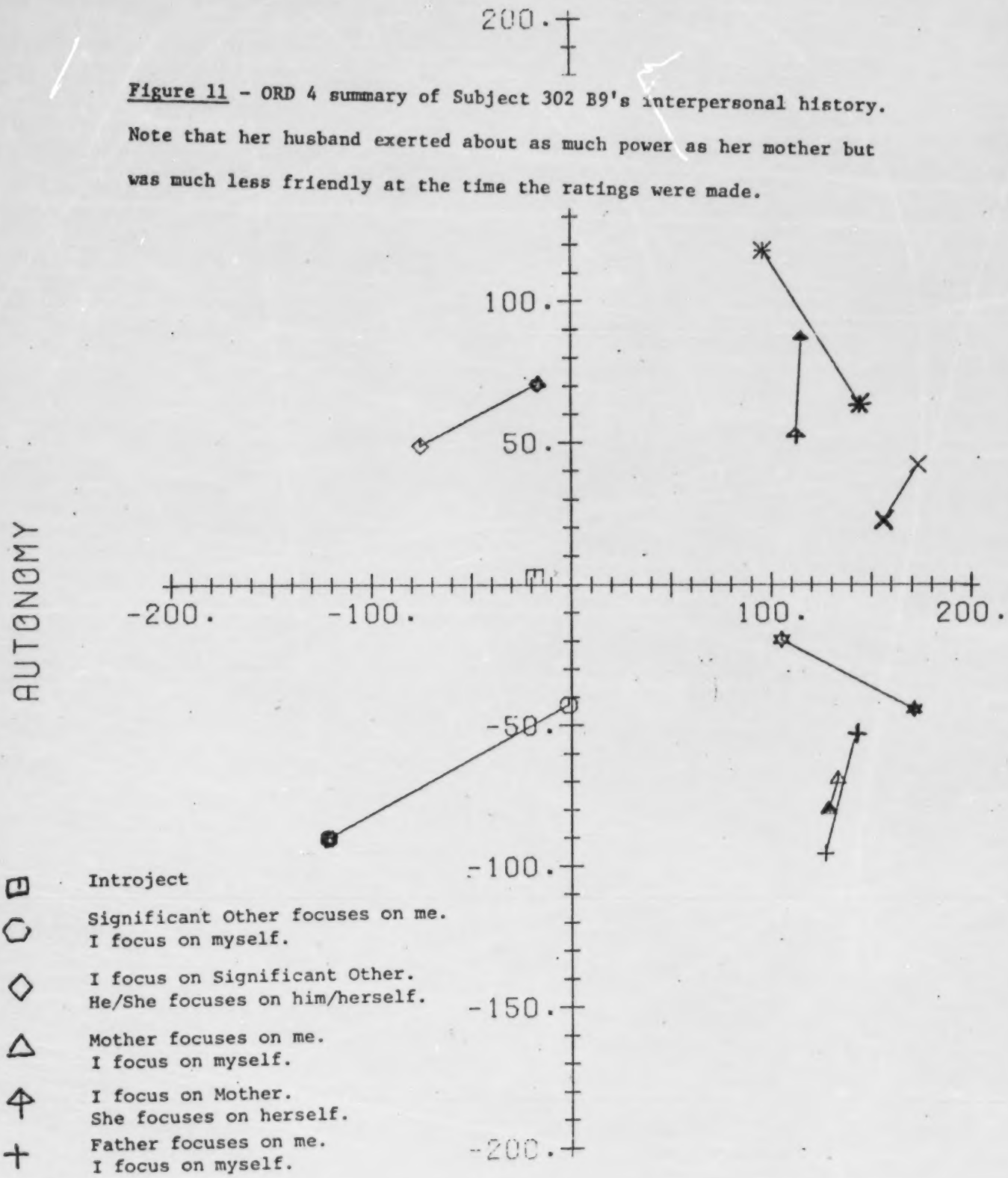


Figure 11 - ORD 4 summary of Subject 302 B9's interpersonal history. Note that her husband exerted about as much power as her mother but was much less friendly at the time the ratings were made.

SUMMARY OF COMPLEMENTARY RELATIONS

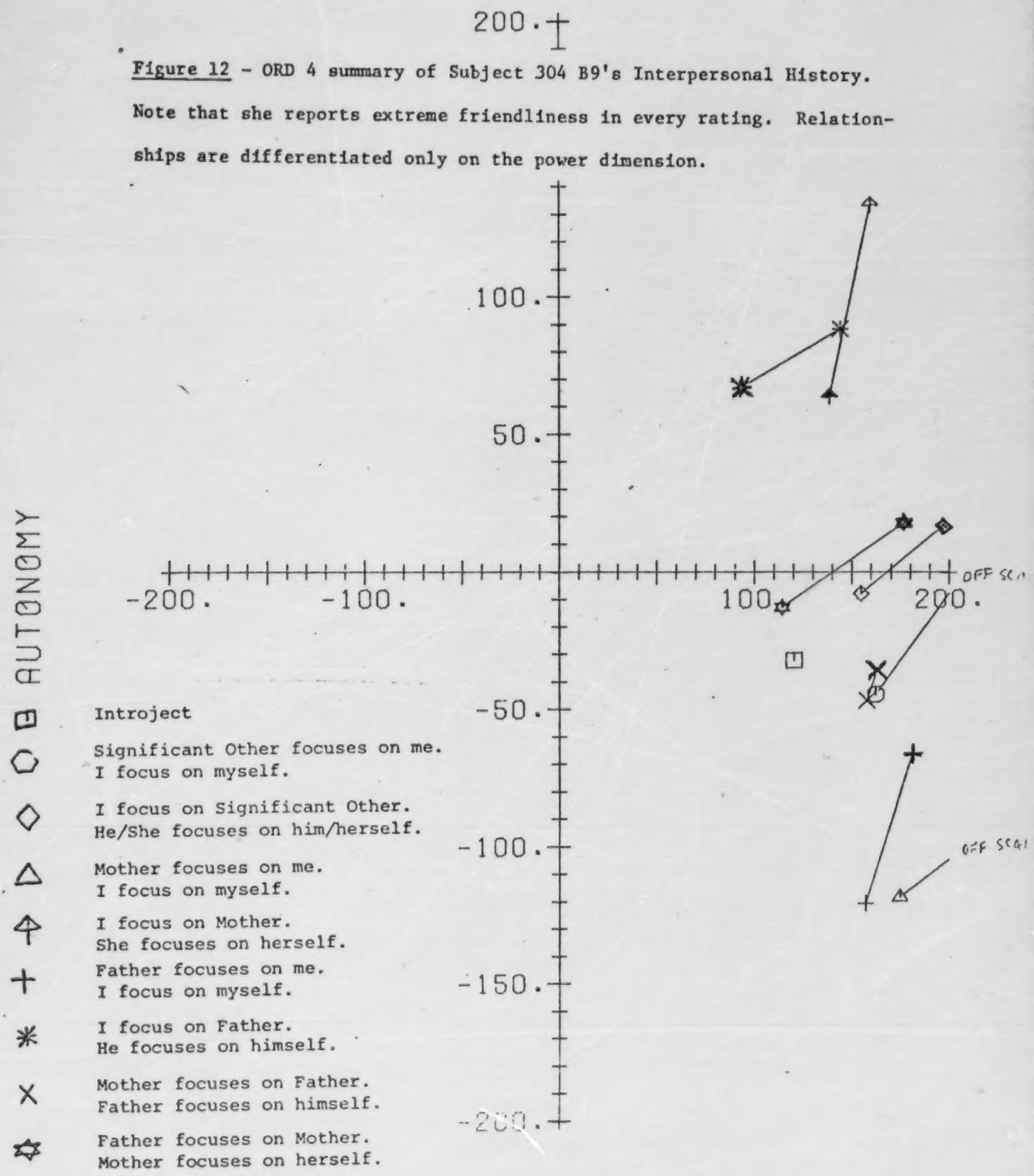
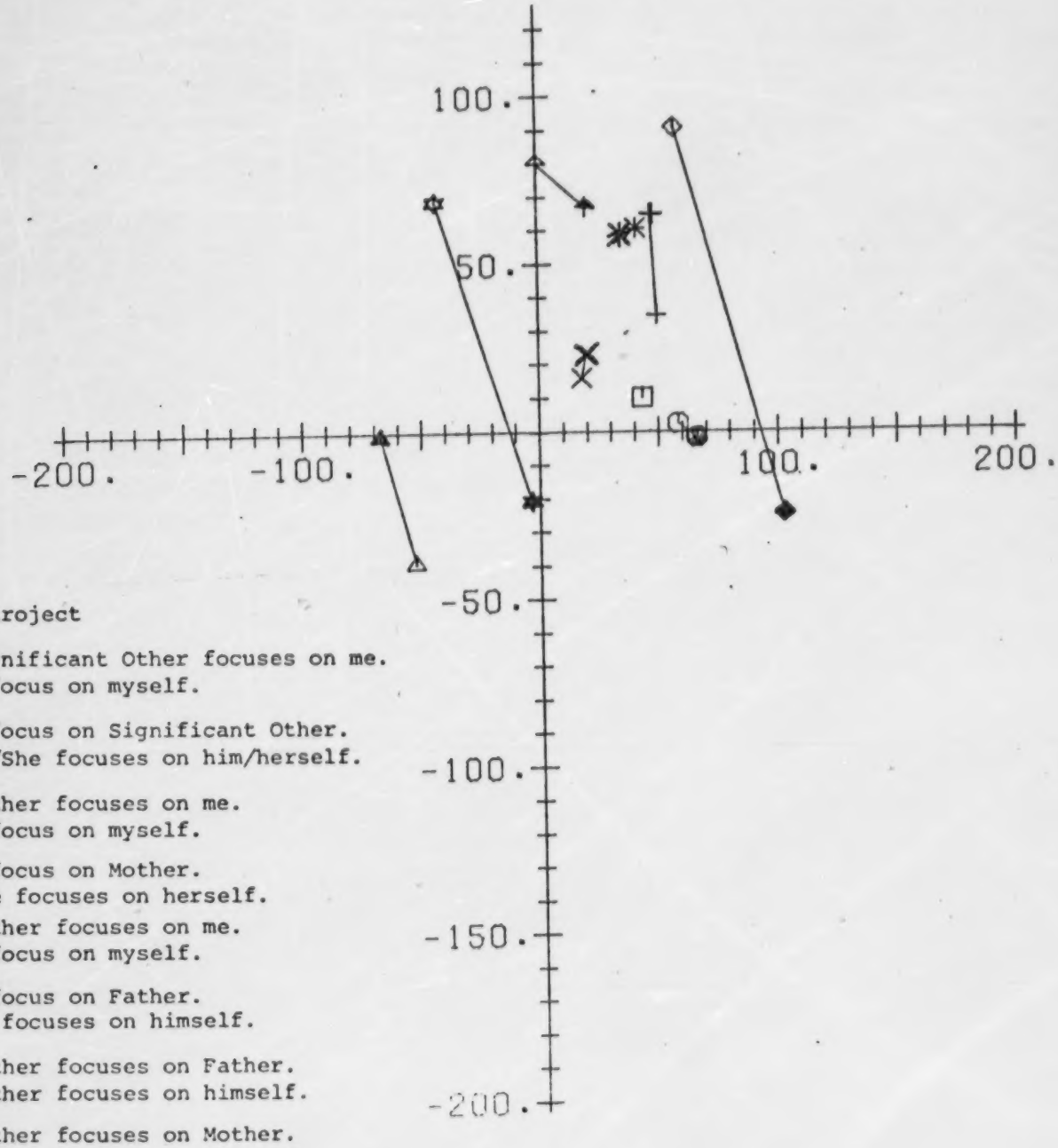


Figure 12 - ORD 4 summary of Subject 304 B9's Interpersonal History. Note that she reports extreme friendliness in every rating. Relationships are differentiated only on the power dimension.

SUMMARY OF COMPLEMENTARY RELATIONS

Figure 13 - ORD 4 summary of Subject 311 B9's interpersonal history. Note that the mother's attack was almost exactly counterbalanced by Subject 311 B9's second spounse's affiliation, and this was reflected in a (newly formed) positive self-concept. Subject 311 B9 was no longer a patient and had divorced a spouse who was similar to her mother.



Introject

Significant Other focuses on me.
I focus on myself.

I focus on Significant Other.
He/She focuses on him/herself.

Mother focuses on me.
I focus on myself.

I focus on Mother.
She focuses on herself.

Father focuses on me.
I focus on myself.

I focus on Father.
He focuses on himself.

Mother focuses on Father.
Father focuses on himself.

Father focuses on Mother.
Mother focuses on herself.

output. More definitive norms will be forthcoming. Presently, numbers generated by the programs can be used by researchers to define between-subject and between-group comparisons in terms of "dynamic" clinical concepts. Perhaps more importantly, the output generated by ORD 2 can be discussed with patients to facilitate their understanding of connections between childhood and adult social experiences; of complementarity in relationship; of some basic dimensions involved in seemingly infinitely complex interpersonal transactions; and of alternative ways of relating. The maps are understood intuitively by nearly everyone, and a frequent response, (often after having expressed grave reservations about computers) is: "Now, I <u>see</u>. I had no idea so much was going to come out of those questionnaires." In addition to facilitating therapy and therapeutic planning, and measuring effectiveness of therapy, the data are also useful in chartkeeping and in interpersonal diagnosis (see McLemore and Benjamin, in press).

Table Legends

Table 1 - Simplified version of the SASB model along with questionnaire items more fully describing each chart point. The center section of this table is from a figure in "Structural Analysis of Differentiation Failure". The questionnaire items are arranged in a different format in the Appendix of that paper. In Psychiatry, Journal for the Study of Interpersonal Process, copyright 1979 by the William Alanson White Psychiatric Foundation. Figure and Items are reprinted by permission.

Table 2 - Key to interpreting interpersonal aspects of output from ORD 2 (Figures 3, 5, 7) and ORD 4 (Figures 10, 11, 12, 13).

Table 3 - Variables defined by CORONY and some illustrative results. CORONY provides measures of complementarity, similarity and measures inter-observed (e.g. husband-wife) agreement about perceptions.

Table 4 - Some average within-subject discrepancy scores (lengths of lines such as those drawn in Figures 10, 11, 12, 13).

NOTE: Table 1, "Questionnaire Items and Specified Version of SASB," by William Alanson White Psychiatric Foundation, is copyrighted 1979, and is not available for reproduction.

References

Benjamin, L. S., "Structural analysis of social behavior", Psychological Review, 1974, 81, 392-425.

Benjamin, L. S., "Structural analysis of differentiation failure", Psychiatry: Journal for the Study of Interpersonal Process, in press, February 1979.

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Benjamin, L. S., "Structural analysis of two-person social interactions", Behavior Sciences Text Library, 1976, out of print. Copies available at cost from the author.

Brakarsh, D., "Sex stereotypy and its effects on marriage", Dissertation, University of Colorado, 1979.

Leary, T., Interpersonal Diagnosis of Personality, New York: Ronald Press, 1957.

McLemore, C., and Benjamin, L. S., "Whatever happened to interpersonal diagnosis: a psychosocial alternative to DSM-III", American Psychologist, in press.

NOTE: Following items from Appendix 1 are copyrighted 1979 by William Alanson White Psychiatric Foundation and are not available for reproduction:
"Series C - 36 Item Intrapsychic Form"
"Series A - 72 Item Interpersonal Form"
"Series B - 72 Item Interpersonal Form"

1978 AVERAGE PROFILES FEMALE PATIENTS

PERSON RATES SELF
1978F89
THE SCORE 39 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH 42.

```
                                                0*  34
                                          13*   *  *  59 LET POTENTIAL UNFOLD
                                      31*       *     *  46 LET SELF DO IT,CONFIDEN
                                  37*           *        *  53 BALANCED SELF ACCEPTANC
                              25*               *           *  53 EXPLORE,HONOR INNER SEL
                          23*                   *              *  55 INTEGRATED,SOLID CORE
                      28*                       *                 *  56 PLEASED WITH SELF
                  25*                           *                    *  54 STROKE,SOOTHE SELF
              19*                               *                       *  68 ENTERTAIN,ENJOY SELF
          16* * * * * * * * * * * * * * * * * * *  * * * * * * * * * * *  47 LOVE,CHERISH SELF
              28*                               *                       *  70 SEEK BEST FOR SELF
                  27*                           *                    *  68 NURTURE,RESTORE SELF
                      26*                       *                 *  66 PROTECT SELF
                          28*                   *              *  69 EXAMINE,ANALYSE SELF
                              37*               *           *  73 PRACTICE,BE ACCOMPLISHE
                                  32*           *        *  48 SELF PAMPER,INDULGE
                                      39*       *     *  52 BENEVOLENT EYE ON SELF
                                          38*   *  *  53 FORCE SPECIFIED IDENTIT
                  CONTROL, MANAGE SELF    42*
```

WEIGHTED AFFILIATION SCORE = 76.
WEIGHTED AUTONOMY SCORE = -16.

PERSON RATES SIGNIFICANT OTHER
1978PB9
THE SCORE 32 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH 36.

```
                                                0*  49 ENDORSE FREEDOM
                                             20*  *  *  67 ENCOURAGE SEPARATE IDEN
                                          23*     *     *  69 YOU CAN DO IT FINE
                                       25*        *        *  71 SUGGEST FAIR EXCHANGE
                                    25*           *           *  70 FRIENDLY EXPLORE,LISTEN
                                 20*              *              *  71 SHOW EMPATHIC UNDERSTAN
                              26*                 *                 *  68 CONFIRM AS OK AS IS
                           24*                    *                    *  69 STROKE,SOOTHE,CALM
                        17*                       *                       *  75 WARMLY WELCOME
                     17*  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  70 TENDER SEXUALITY
                        14*                       *                       *  66 FRIENDLY INVITE
                           21*                    *                    *  63 PROVIDE FOR,NURTURE
                              19*                 *                 *  62 PROTECT,BACK UP
                                 17*              *              *  67 SENSIBLE ANALYSIS
                                    25*           *           *  67 CONSTRUCTIVE STIMULATE
                                       21*        *        *  20
                                          25*     *     *  46 BENEVOLENT MONITOR,REMI
                                             30*  *  *  25
                                               11*
```

WEIGHTED AFFILIATION SCORE = 101.
WEIGHTED AUTONOMY SCORE = 33.

```
                                                0*  40 FREELY COME AND GO
                        GO OWN SEPARATE WAY    46*  *  *  77 OWN IDENTITY,STANDARDS
                                             26*     *     *  65 ASSERT ON OWN
                                          28*        *        *  68 RECIPROCAL NEGOTIATE
                        AVOID THROUGH ACTIVITIES 40*           *           *  65 OPENLY DISCLOSE,REVEAL
                                       21*        *        *  66 CLEARLY EXPRESS
                                    25*           *           *  63 ENTHUSIASTIC SHOWING
                                 28*              *              *  65 RELAX,FLOW,ENJOY
                              18*                 *                 *  70 JOYFUL APPROACH
                           10*  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  67 ECSTATIC RESPONSE
                              7*                  *                  *  68 FOLLOW,MAINTAIN CONTACT
                                 26*              *              *  57 ACCEPT CARETAKING
                                    25*           *           *  66 ASK,TRUST,COUNT ON
                                       32*        *        *  65 ACCEPT REASON
                                          13*     *     *  65 TAKE IN,TRY,LEARN FROM
                                             26*  *  *  32
                                                28*  *  19
                        FOLLOW RULES,PROPER    41*  *  *  36 SUBMERGE INTO HOLE
                                               31*
```

WEIGHTED AFFILIATION SCORE = 91.
WEIGHTED AUTONOMY SCORE = 30.

PERSON RATES SELF RE SIGNIFICANT OTHER
1978PB9
THE SCORE 31 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH 32.

```
                                                    0*  46 ENDORSE FREEDOM
                                                17* * *  54 ENCOURAGE SEPARATE IDEN
                                             14*    *    *  79 YOU CAN DO IT FINE
                                          23*       *      *  68 SUGGEST FAIR EXCHANGE
                                       22*          *        *  73 FRIENDLY EXPLORE,LISTEN
                                    23*             *          *  70 SHOW EMPATHIC UNDERSTAN
                                 22*                *            *  69 CONFIRM AS OK AS IS
                              18*                   *              *  63 STROKE,SOOTHE,CALM
                           17*                      *                *  78 WARMLY WELCOME
                        11* * * * * * * * * * * * * * * * * * * * * *  70 TENDER SEXUALITY
                           19*                      *                *  76 FRIENDLY INVITE
                        17*                         *              *  65 PROVIDE FOR,NURTURE
                     20*                            *            *  62 PROTECT,BACK UP
                  18*                               *          *  65 SENSIBLE ANALYSIS
               21*                                  *        *  67 CONSTRUCTIVE STIMULATE
            20*                                     *      *  20
         28*                                        *    *  45 BENEVOLENT MONITOR,REMI
FORCE CONFORMITY                                 32* * *  28
                                                 10*
```

WEIGHTED AFFILIATION SCORE = 107.
WEIGHTED AUTONOMY SCORE = 27.

```
                                                    0*  48 FREELY COME AND GO
GO OWN SEPARATE WAY                              52* * *  76 OWN IDENTITY,STANDARDS
                                                17*    *    *  65 ASSERT ON OWN
                                             23*       *      *  75 RECIPROCAL NEGOTIATE
                                          29*          *        *  69 OPENLY DISCLOSE,REVEAL
                                       19*             *          *  71 CLEARLY EXPRESS
                                    30*                *            *  73 ENTHUSIASTIC SHOWING
                                 19*                   *              *  78 RELAX,FLOW,ENJOY
                              17*                      *                *  76 JOYFUL APPROACH
                        20* * * * * * * * * * * * * * * * * * * * * *  62 ECSTATIC RESPONSE
                           16*                      *                *  76 FOLLOW,MAINTAIN CONTACT
                        31*                         *              *  71 ACCEPT CARETAKING
                     29*                            *            *  73 ASK,TRUST,COUNT ON
                  28*                               *          *  60 ACCEPT REASON
               28*                                  *        *  61 TAKE IN,TRY,LEARN FROM
            25*                                     *      *  31
         15*                                        *    *  26
FOLLOW RULES,PROPER                              38* * *  35 SUBMERGE INTO ROLE
                                                 29*
```

WEIGHTED AFFILIATION SCORE = 99.
WEIGHTED AUTONOMY SCORE = 33.

PERSON RATES MOTHER
1978PB9
THE SCORE 38 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH 40.

```
                                                    0*  34
                                                 32* * * 36
                                              26*    *    * 66 YOU CAN DO IT FINE
                                           30*       *      * 48 SUGGEST FAIR EXCHANGE
                                        28*          *        * 43 FRIENDLY EXPLORE,LISTEN
                    ILLOGICAL INITIATION   53*      *          * 54 SHOW EMPATHIC UNDERSTAN
                                        36*         *            * 52 CONFIRM AS OK AS IS
                                     33*            *              * 49 STROKE,SOOTHE,CALM
                                  33*               *                * 66 WARMLY WELCOME
                                31* * * * * * * * * * * * * * * * * * * 24
                                  37*               *                * 61 FRIENDLY INVITE
                                34*                 *              * 61 PROVIDE FOR,NURTURE
                                   38*              *            * 56 PROTECT,BACK UP
                                      38*           *          * 49 SENSIBLE ANALYSIS
                    ACCUSE,BLAME                51* *        * 53 CONSTRUCTIVE STIMULATE
                      PUT DOWN,ACT SUPERIOR     43*  *      * 28
                        INTRUDE,BLOCK,RESTRICT  52*    *  * 65 BENEVOLENT MONITOR,REMI
                          FORCE CONFORMITY      71* * *  70 SPECIFY WHAT'S BEST
                            MANAGE,CONTROL      50*
```

WEIGHTED AFFILIATION SCORE = 32.
WEIGHTED AUTONOMY SCORE = -27.

```
                                                    0*  48 FREELY COME AND GO
                                                 34* * *  56 OWN IDENTITY,STANDARDS
                                              28*    *    * 42 ASSERT ON OWN
                                           35*       *      * 67 RECIPROCAL NEGOTIATE
                                        31*          *        * 47 OPENLY DISCLOSE,REVEAL
                    NONCONTINGENT REACTION  42*      *          * 56 CLEARLY EXPRESS
                                        31*         *            * 65 ENTHUSIASTIC SHOWING
                                     28*            *              * 55 RELAX,FLOW,ENJOY
                                  26*               *                * 56 JOYFUL APPROACH
                                33* * * * * * * * * * * * * * * * * * * 25
                                  26*               *                * 62 FOLLOW,MAINTAIN CONTACT
                                29*                 *              * 52 ACCEPT CARETAKING
                                   29*              *            * 58 ASK,TRUST,COUNT ON
                                      30*           *          * 44 ACCEPT REASON
                                         35*        *        * 26
                                            37*     *      * 32
                                              20*   *    * 19
                                                 21* * *  24
                    YIELD,SUBMIT,GIVE IN         40*
```

WEIGHTED AFFILIATION SCORE = 42.
WEIGHTED AUTONOMY SCORE = 29.

PERSON RATES SELF RE MOTHER
1978PB9
THE SCORE 39 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH 40.

```
                                                    0*  36
                                                  34* * *  33
                                              21*   *    *  52 YOU CAN DO IT FINE
                                            34*     *      *  54 SUGGEST FAIR EXCHANGE
                                          35*       *       *  60 FRIENDLY EXPLORE,LISTEN
                                        24*         *         *  55 SHOW EMPATHIC UNDERSTAN
                                      31*           *           *  50 CONFIRM AS OK AS IS
                                    27*             *             *  56 STROKE,SOOTHE,CALM
                                  20*               *               *  63 WARMLY WELCOME
                                15* * * * * * * * * * * * * * * * * * *  26
                              16*                   *                   *  57 FRIENDLY INVITE
                            15*                     *                     *  46 PROVIDE FOR,NURTURE
                          15*                       *                       *  42 PROTECT,BACK UP
                        26*                         *                         *  46 SENSIBLE ANALYSIS
                      25*                           *                           *  39
                    23*                             *                             *  24
                  24*                               *                               *  32
                31* * *                             *                             * *  29
                  10*
```

WEIGHTED AFFILIATION SCORE = 56.
WEIGHTED AUTONOMY SCORE = 27.

```
                                                    0*  38
                    GO OWN SEPARATE WAY           47* * *  60 OWN IDENTITY,STANDARDS
                                                30*   *    *  49 ASSERT ON OWN
                                              37*     *      *  60 RECIPROCAL NEGOTIATE
                    AVOID THROUGH ACTIVITIES  45*       *       *  48 OPENLY DISCLOSE,REVEAL
                                            25*         *         *  45 CLEARLY EXPRESS
                                          36*           *           *  69 ENTHUSIASTIC SHOWING
                                        25*             *             *  53 RELAX,FLOW,ENJOY
                    FLEE,RUN AWAY,WITHDRAW  41*         *               *  50 JOYFUL APPROACH
                                          24* * * * * * * * * * * * * * * * * * *  27
                    WARY,FEARFUL            40*                               *  61 FOLLOW,MAINTAIN CONTACT
                      SACRIFICE               41*                             *  62 ACCEPT CARETAKING
                                            35*                               *  64 ASK,TRUST,COUNT ON
                    UNCOMPREHENDING AGREE     44*                           *  59 ACCEPT REASON
                                            38*                             *  52 TAKE IN,TRY,LEARN FROM
                      SULK,ACT PUT UPON       40*                         *  45 CLING,DEPEND
                                            31*                           *  39
                        FOLLOW RULES,PROPER   57* * *  51 SUBMERGE INTO ROLE
                          YIELD,SUBMIT,GIVE IN  52*
```

WEIGHTED AFFILIATION SCORE = 38.
WEIGHTED AUTONOMY SCORE = -4.

PERSON RATES FATHER
1978P89
THE SCORE 33 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH 34.

```
                                                    0*  47 ENDORSE FREEDOM
                                                 31* * *  49 ENCOURAGE SEPARATE IDEN
                                              24*    *    *  65 YOU CAN DO IT FINE
                                           32*       *      *  60 SUGGEST FAIR EXCHANGE
                                        32*          *        *  55 FRIENDLY EXPLORE,LISTEN
                    ILLOGICAL INITIATION   40*      *          *  56 SHOW EMPATHIC UNDERSTAN
                                        32*         *           *  59 CONFIRM AS OK AS IS
                                     22*            *            *  58 STROKE,SOOTHE,CALM
                                  20*               *               *  73 WARMLY WELCOME
                               18* * * * * * * * * * * * * * * * * * * * 30
                                  21*               *               *  64 FRIENDLY INVITE
                                  21*               *            *  64 PROVIDE FOR,NURTURE
                                  27*               *         *  57 PROTECT,BACK UP
                                     25*            *      *  55 SENSIBLE ANALYSIS
                                        33*         *   *  62 CONSTRUCTIVE STIMULATE
                    PUT DOWN,ACT SUPERIOR     36*   *    *  22
                      INTRUDE,BLOCK,RESTRICT    34* *  *  50 BENEVOLENT MONITOR,REMI
                        FORCE CONFORMITY          64* * *  68 SPECIFY WHAT'S BEST
                                                  33*
```

WEIGHTED AFFILIATION SCORE = 66.
WEIGHTED AUTONOMY SCORE = -0.

```
                                                    0*  57 FREELY COME AND GO
                        GO OWN SEPARATE WAY       48* * *  77 OWN IDENTITY,STANDARDS
                                               21*    *    *  65 ASSERT ON OWN
                                            30*       *      *  68 RECIPROCAL NEGOTIATE
                      AVOID THROUGH ACTIVITIES  38*   *        *  36 OPENLY DISCLOSE,REVEAL
                    NONCONTINGENT REACTION      38*   *          *  62 CLEARLY EXPRESS
                                           29*        *           *  68 ENTHUSIASTIC SHOWING
                                        19*           *            *  60 RELAX,FLOW,ENJOY
                                     17*              *               *  61 JOYFUL APPROACH
                                  18* * * * * * * * * * * * * * * * * * * * 32
                                     14*               *               *  58 FOLLOW,MAINTAIN CONTACT
                                     20*               *            *  49 ACCEPT CARETAKING
                                        28*            *         *  52 ASK,TRUST,COUNT ON
                                        28*            *      *  55 ACCEPT REASON
                                           18*         *   *  19
                                           19*         *    *  16
                                              21*      *  *  21
                                                 25*   * *  24
                                                    31*
```

WEIGHTED AFFILIATION SCORE = 60.
WEIGHTED AUTONOMY SCORE = 52.

PERSON RATES SELF RE FATHER
1978PB9
THE SCORE 36 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED STANT WITH 37.

```
                                                    0*  37 ENDORSE FREEDOM
                                                  35*  *  *  34
                                                26*    *    *  44 YOU CAN DO IT FINE
                                              33*      *      *  51 SUGGEST FAIR EXCHANGE
                                            31*        *        *  53 FRIENDLY EXPLORE,LISTEN
                                          36*          *          *  60 SHOW EMPATHIC UNDERSTAN
                                        26*            *            *  54 CONFIRM AS OK AS IS
                                      24*              *              *  51 STROKE,SOOTHE,CALM
                                    22*                *                *  62 WARMLY WELCOME
                                  18*  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  28
                                    19*                *                *  57 FRIENDLY INVITE
                                      13*              *              *  38 PROVIDE FOR,NURTURE
                                        25*            *            *  39 PROTECT,BACK UP
                                          25*          *          *  52 SENSIBLE ANALYSIS
                                            25*        *        *  36
                                              25*      *      *  18
                                                22*    *    *  31
                          FORCE CONFORMITY        37*  *  *  25
                                                    10*
```

WEIGHTED AFFILIATION SCORE = 50.
WEIGHTED AUTONOMY SCORE = 27.

```
                                                    0*  45 FREELY COME AND GO
                          GO OWN SEPARATE WAY     47*  *  *  49 OWN IDENTITY,STANDARDS
                                                25*    *    *  63 ASSERT ON OWN
                                              34*      *      *  59 RECIPROCAL NEGOTIATE
                                AVOID THROUGH ACTIVITIES  37*        *        *  43 OPENLY DISCLOSE,REVEAL
                                            29*          *          *  49 CLEARLY EXPRESS
                                          36*            *            *  54 ENTHUSIASTIC SHOWING
                                        28*              *              *  57 RELAX,FLOW,ENJOY
                                      32*                *                *  54 JOYFUL APPROACH
                                    23*  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  30
                                      30*                *                *  65 FOLLOW,MAINTAIN CONTACT
                                        33*              *              *  62 ACCEPT CARETAKING
                                          32*            *            *  62 ASK,TRUST,COUNT ON
                                UNCOMPREHENDING AGREE       42*          *          *  60 ACCEPT REASON
                                  WHINE,DEFEND,JUSTIFY      37*        *        *  64 TAKE IN,TRY,LEARN FROM
                                              33*      *      *  49 CLING,DEPEND
                                                36*    *    *  34
                          FOLLOW RULES,PROPER       55*  *  *  48 SUBMERGE INTO ROLE
                            YIELD,SUBMIT,GIVE IN    53*
```

WEIGHTED AFFILIATION SCORE = 48.
WEIGHTED AUTONOMY SCORE = -9.

PERSON RATES MOTHER RE FATHER
1978P89
THE SCORE 44 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH 46.

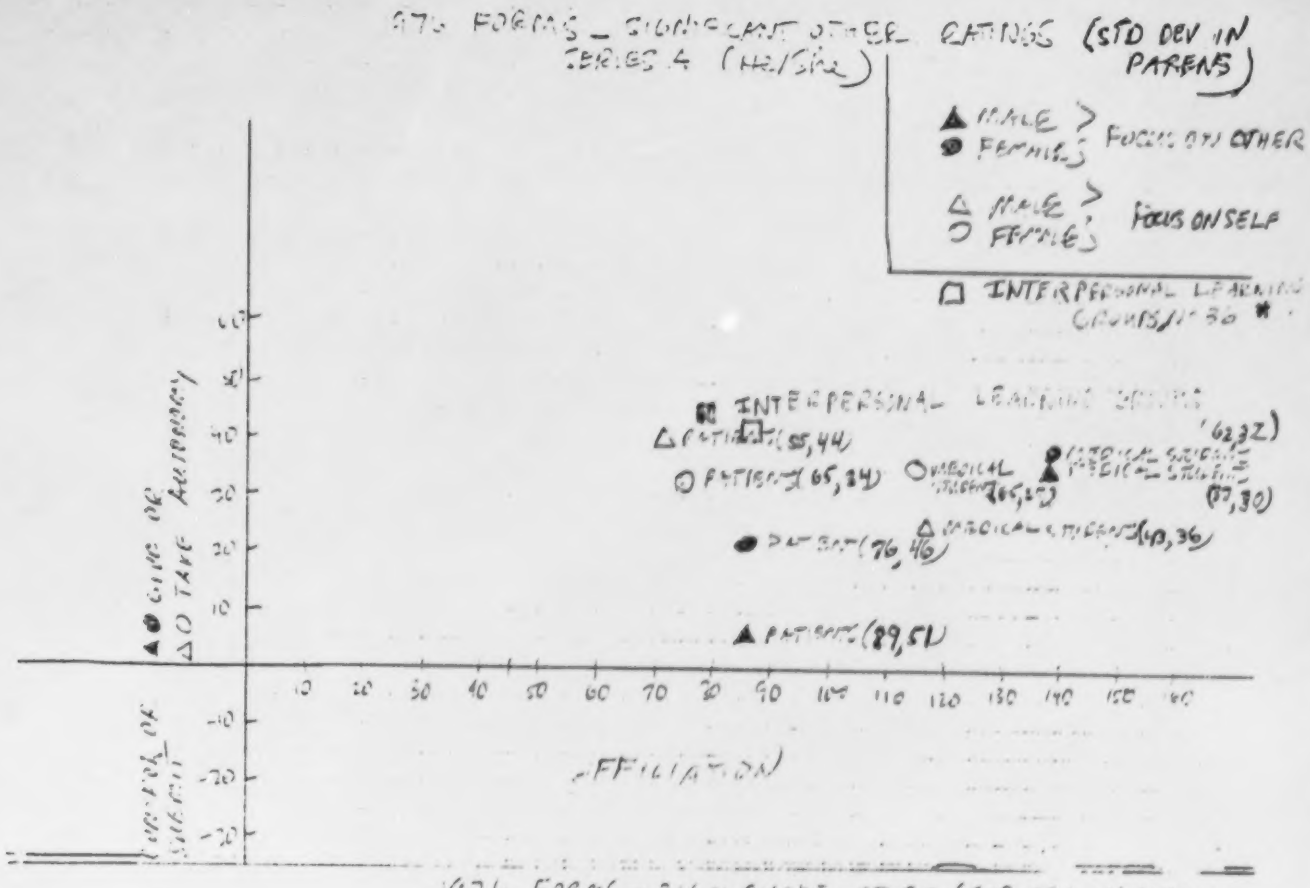
```
                                                    0*  35
                                                28* * *  36
                                             19*    *    *  64 YOU CAN DO IT FINE
                                          31*       *      *  50 SUGGEST FAIR EXCHANGE
                                       21*          *        *  47 FRIENDLY EXPLORE,LISTEN
                    ILLOGICAL INITIATION  49*       *          *  55 SHOW EMPATHIC UNDERSTAN
                                       24*          *            *  54 CONFIRM AS OK AS IS
                                    31*             *              *  58 STROKE,SOOTHE,CALM
                                 38*                *                *  56 WARMLY WELCOME
                              37* * * * * * * * * * * * * * * * * * * * * * * *  43
                                 39*                *                *  65 FRIENDLY INVITE
                                 33*                *              *  64 PROVIDE FOR,NURTURE
                                    41*             *            *  58 PROTECT,BACK UP
                                       35*          *          *  44
                       ACCUSE,BLAME     48*        *        *  46 CONSTRUCTIVE STIMULATE
                                          44*      *      *  38
                          INTRUDE,BLOCK,RESTRICT     46*  *    *  58 BENEVOLENT MONITOR,REMI
                            FORCE CONFORMITY         56* *  *  42
                                                     36*
```

WEIGHTED AFFILIATION SCORE = 39.
WEIGHTED AUTONOMY SCORE = -16.

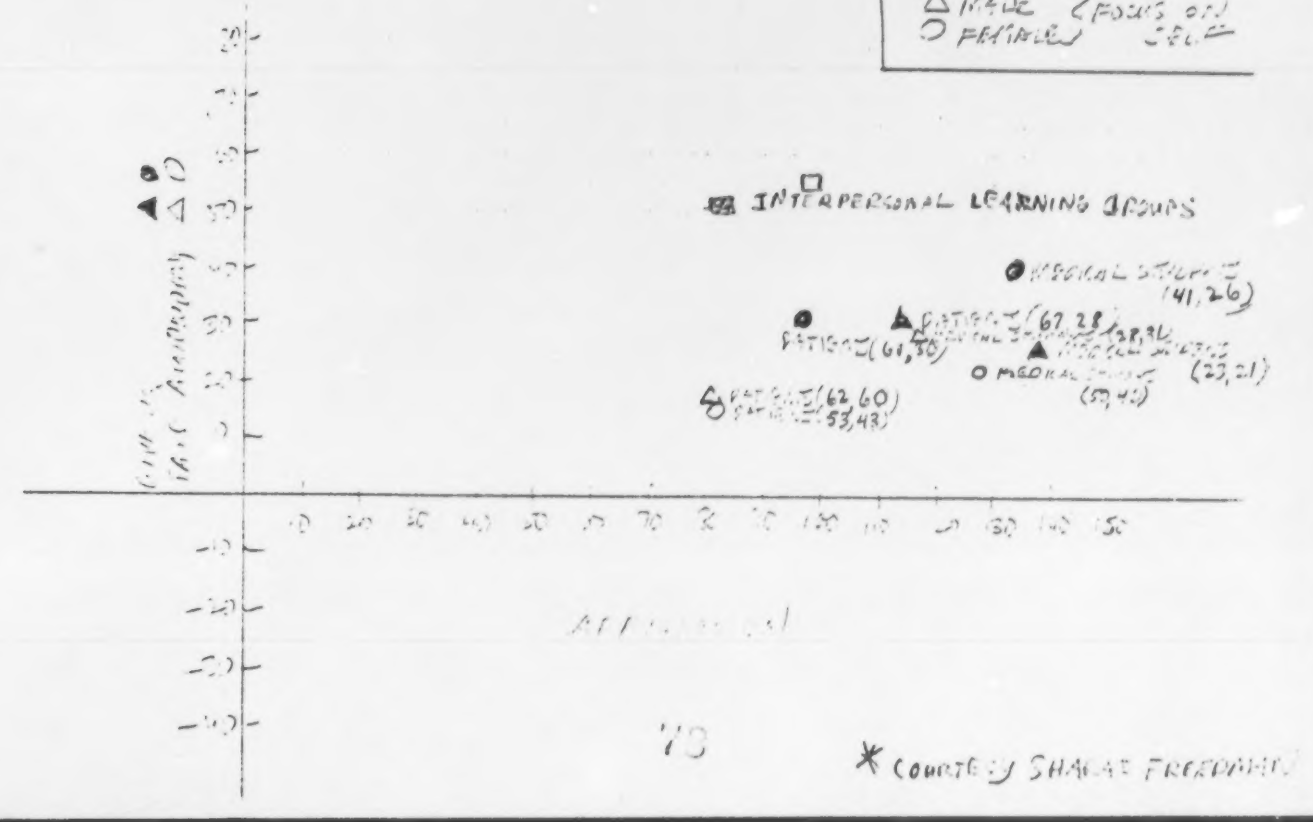
```
                                                    0*  33
                                                37* * *  50 OWN IDENTITY,STANDARDS
                                             24*    *    *  47 ASSERT ON OWN
                                          31*       *      *  58 RECIPROCAL NEGOTIATE
                                       25*          *        *  58 OPENLY DISCLOSE,REVEAL
                                    44*             *          *  43
                                 37*                *            *  57 ENTHUSIASTIC SHOWING
                              30*                   *              *  54 RELAX,FLOW,ENJOY
                           20*                      *                *  52 JOYFUL APPROACH
                        36* * * * * * * * * * * * * * * * * * * * * *  43
                           31*                      *                *  66 FOLLOW,MAINTAIN CONTACT
                 SACRIFICE    56*                  *              *  59 ACCEPT CARETAKING
                                 31*               *            *  56 ASK,TRUST,COUNT ON
                    UNCOMPREHENDING AGREE     46*  *          *  51 ACCEPT REASON
                      WHINE,DEFEND,JUSTIFY    46*  *        *  67 TAKE IN,TRY,LEARN FROM
                        SULK,ACT PUT UPON        51*  *      *  68 CLING,DEPEND
                                                 35*  *    *  37
                           FOLLOW RULES,PROPER      57* *  *  48 SUBMERGE INTO ROLE
                             YIELD,SUBMIT,GIVE IN   60*
```

WEIGHTED AFFILIATION SCORE = 41.
WEIGHTED AUTONOMY SCORE = -23.

```
PERSON RATES FATHER RE MOTHER
 1978PB9
THE SCORE     44 IS MEDIAN

CHART PRINTS ALL SCORES ABOVE MED START WITH   46.
                                          0*  37
                                       36* * * 41
                                    32*   *   * 47 YOU CAN DO IT FINE
                                 36*      *     * 58 SUGGEST FAIR EXCHANGE
                              32*         *       * 57 FRIENDLY EXPLORE,LISTEN
                           39*            *         * 54 SHOW EMPATHIC UNDERSTAN
                        29*               *           * 54 CONFIRM AS OK AS IS
                     33*                  *             * 55 STROKE,SOOTHE,CALM
                  20*                     *               * 66 WARMLY WELCOME
               21* * * * * * * * * * * * * * * * * * * * * 44
                  18*                     *               * 61 FRIENDLY INVITE
                     21*                  *             * 66 PROVIDE FOR,NURTURE
                        23*               *           * 62 PROTECT,BACK UP
                           26*            *         * 48 SENSIBLE ANALYSIS
                              37*         *       * 54 CONSTRUCTIVE STIMULATE
                                 40*      *     * 32
                                    36*   *   * 40
                     FORCE CONFORMITY       54* * * 55 SPECIFY WHAT'S REST
                                            32*

WEIGHTED AFFILIATION SCORE =   62.
WEIGHTED AUTONOMY SCORE =    1.

                                          0*  51 FREELY COME AND GO
                     GO OWN SEPARATE WAY    59* * *  73 OWN IDENTITY,STANDARDS
                                       31*   *   * 73 ASSERT ON OWN
                                    44*      *     * 68 RECIPROCAL NEGOTIATE
                        AVOID THROUGH ACTIVITIES 53*  *       * 54 OPENLY DISCLOSE,RFVEAL
                                 41*            *         * 59 CLEARLY EXPRESS
                              30*               *           * 65 ENTHUSIASTIC SHOWING
                           22*                  *             * 60 RELAX,FLOW,ENJOY
                        26*                     *               * 58 JOYFUL APPROACH
                     29* * * * * * * * * * * * * * * * * * * * * 46 ECSTATIC RESPONSE
                        19*                     *               * 69 FOLLOW,MAINTAIN CONTACT
                           21*                  *             * 69 ACCEPT CARETAKING
                              35*               *           * 62 ASK,TRUST,COUNT ON
                  UNCOMPREHENDING AGREE    46*  *         * 52 ACCEPT REASON
                                       37*   *       * 48 TAKE IN,TRY,LEARN FROM
                                    33*      *     * 49 CLING,DEPEND
                                       35*   *   * 38
                     FOLLOW RULES,PROPER    46* * * 39
                       YIELD,SUBMIT,GIVE IN 48*

WEIGHTED AFFILIATION SCORE =   60.
WEIGHTED AUTONOMY SCORE =   25.

@FIN

    RUNID:  B207U3    PROJECT: 11016              USER: 342504159

  ITEM                                AMOUNT      COST
```



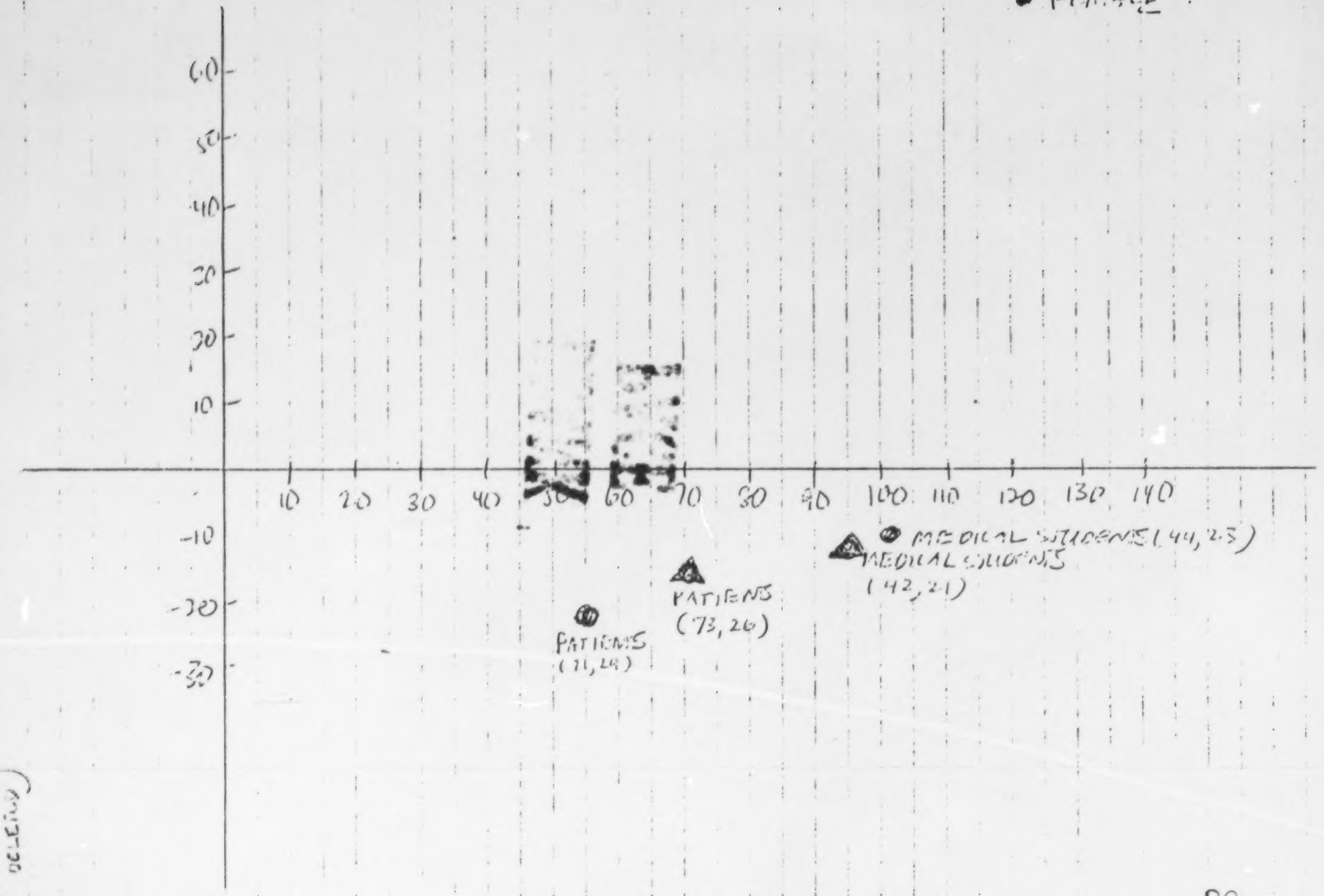
16PF FORMS – SIGNIFICANT OTHER (STD DEV IN PARENS)
SERIES B (HS)



* COURTESY SHAKAR FREEDMAN

SERIES C

▲ MALE
● FEMALE



80

Appendix IV - continued

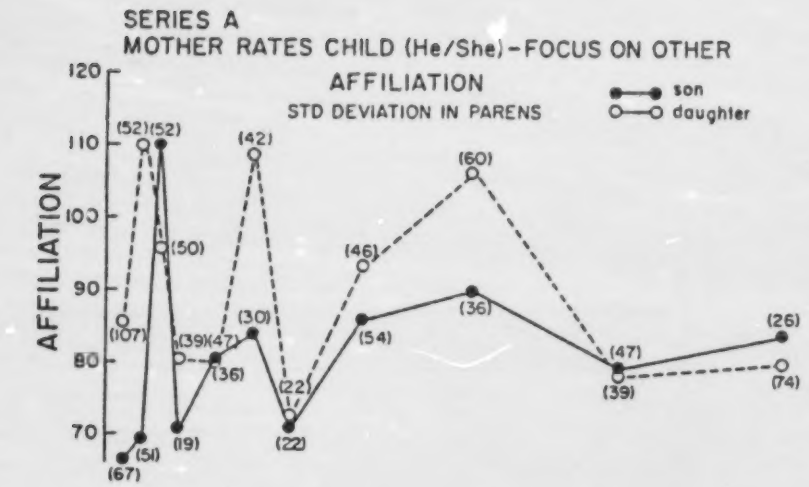
1978 Forms

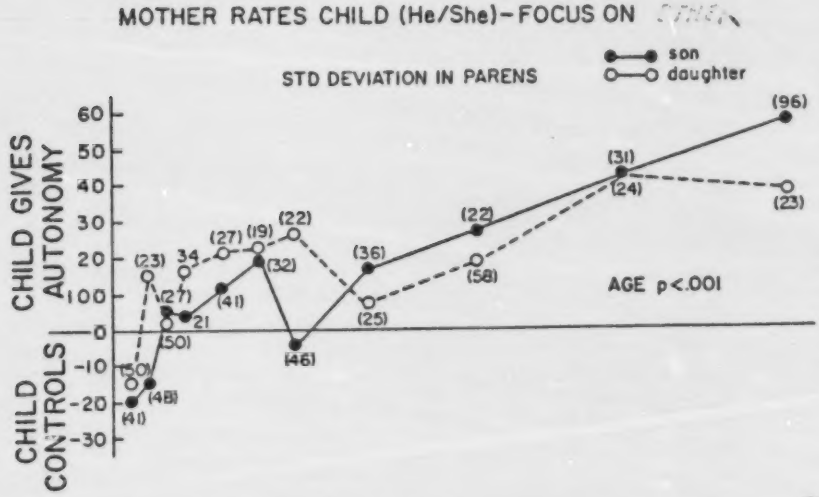
Coefficients of Internal Consistency (
defined in section headed Autocorrelation Patterns

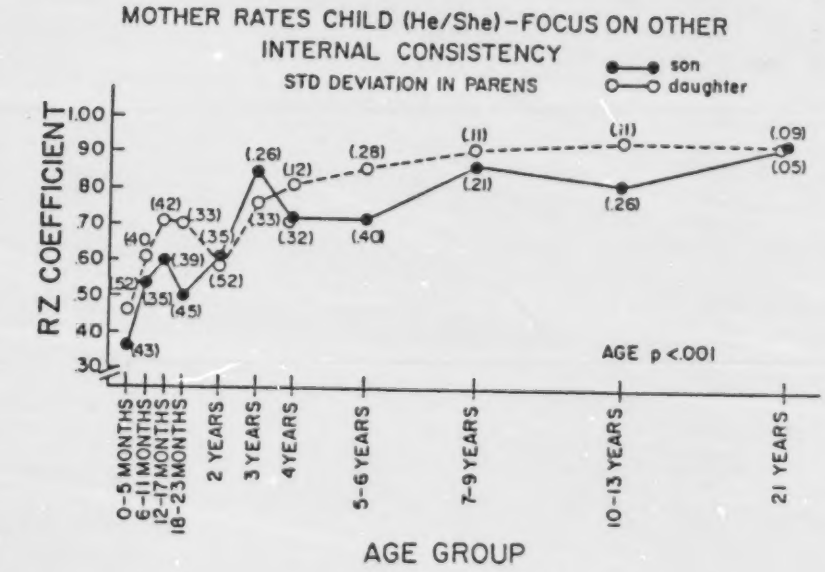
			FOCUS ON OTHER	ON SELF
Ratings of Significant Other (He/She)				
1978	N = 9	Psychiatric Males	.67(.29)	.56(.43)
1978	N = 14	Psychiatric Females	.86(.34)	.93(.09)
1978	N = 239	Elderly Women	.85(.29)	.86(.26)
1976	N = 8	Psychiatric Males	.83(.30)	.80(.22)
1976	N = 40	Psychiatric Females	.77(.37)	.75(.36)
1976	N = 29	Medical Student Males	.96(.12)	.96(.07)
1976	N = 27	Medical Student Females	.95(.6)	.90(.20)
Self Relating to Significant Other (I)				
1978	N = 9	Psychiatric Males	.85(.35)	.71(.48)
1978	N = 15	Psychiatric Females	.90(.22)	.92(.22)
1978	N = 239	Elderly Women	.90(.21)	.90(.20)
1976	N = 8	Psychiatric Males	.81(.35)	.74(.35)
1976	N = 41	Psychiatric Females	.83(.31)	.79(.31)
1976	N = 29	Medical Student Males	.99(.02)	.95(.08)
1976	N = 27	Medical Student Females	.91(.26)	.95(.14)

			INTROJECT
Ratings of Self			
1978	N = 9	Psychiatric Males	.71(.44)
1978	N = 15	Psychiatric Females	.88(.18)
1976	N = 8	Psychiatric Males	.81(.19)
1976	N = 49	Psychiatric Females	.69(.38)
1976	N = 29	Medical Student Males	.87(.24)
1976	N = 27	Medical Student Females	.89(.22)

APPENDIX I


SERIES A
MOTHER RATES CHILD (He/She)-FOCUS ON OTHER
AFFILIATION
STD DEVIATION IN PARENS
son
daughter
AFFILIATION
120
110
100
90
80
70
(52)(52)
(42)
(60)
(50)
(46)
(107)
(39)(47)
(30)
(36)
(54)
(26)
(47)
(74)
(39)
(22)
(22)
(19)
(51)
(67)

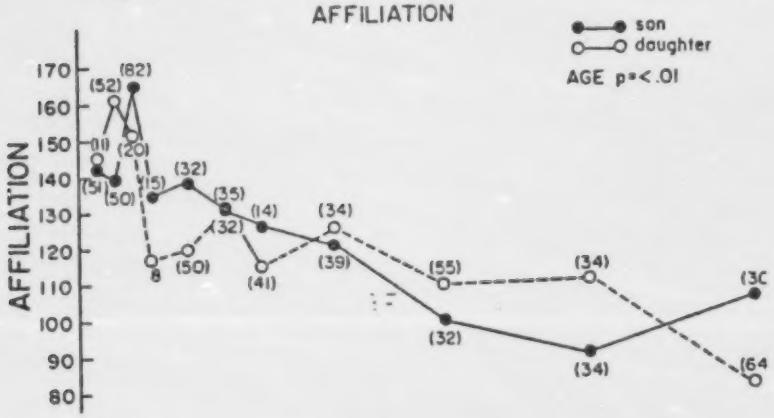

MOTHER RATES CHILD (He/She)-FOCUS ON
STD DEVIATION IN PARENS
son
daughter
CHILD GIVES AUTONOMY
CHILD CONTROLS
60
50
40
30
20
10
0
-10
-20
-30
(96)
(31)
(24)
(23)
(22)
(22)
(36)
(58)
(27)
(19)
(23)
34
(32)
(41)
(27)
21
(50)
(25)
(46)
(50)
(48)
(41)
AGE p<.001


MOTHER RATES CHILD (He/She)-FOCUS ON OTHER
INTERNAL CONSISTENCY
STD DEVIATION IN PARENS
son
daughter
RZ COEFFICIENT
1.00
90
80
70
60
50
40
30
(11)
(11)
(09)
(05)
(28)
(12)
(26)
(42)
(33)
(40)
(35)
(33)
(21)
(26)
(39)
(52)
(35)
(45)
(52)
(32)
(40)
(43)
AGE p<.001
0-5 MONTHS
6-11 MONTHS
12-17 MONTHS
18-23 MONTHS
2 YEARS
3 YEARS
4 YEARS
5-6 YEARS
7-9 YEARS
10-13 YEARS
21 YEARS
AGE GROUP

SERIES A

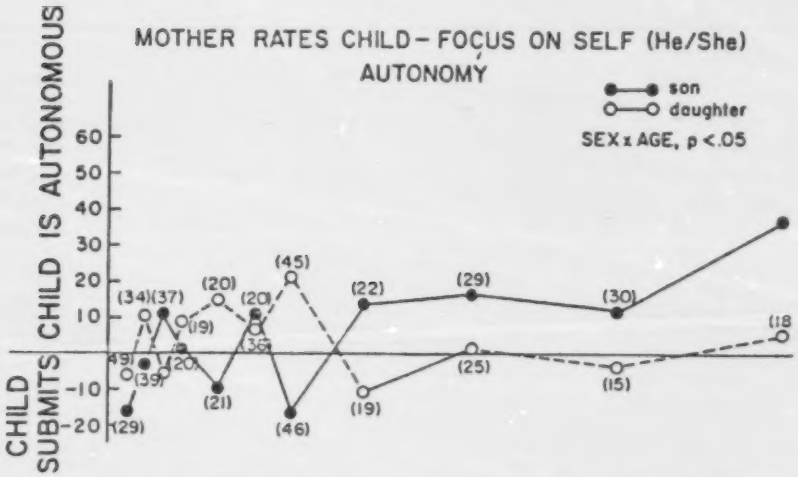
MOTHER RATES CHILD – FOCUS ON SELF (He/She)

AFFILIATION



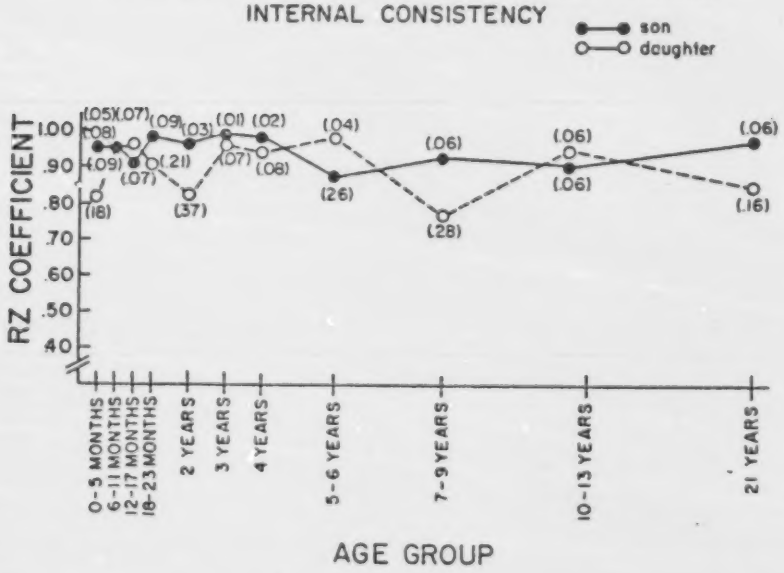
MOTHER RATES CHILD – FOCUS ON SELF (He/She)

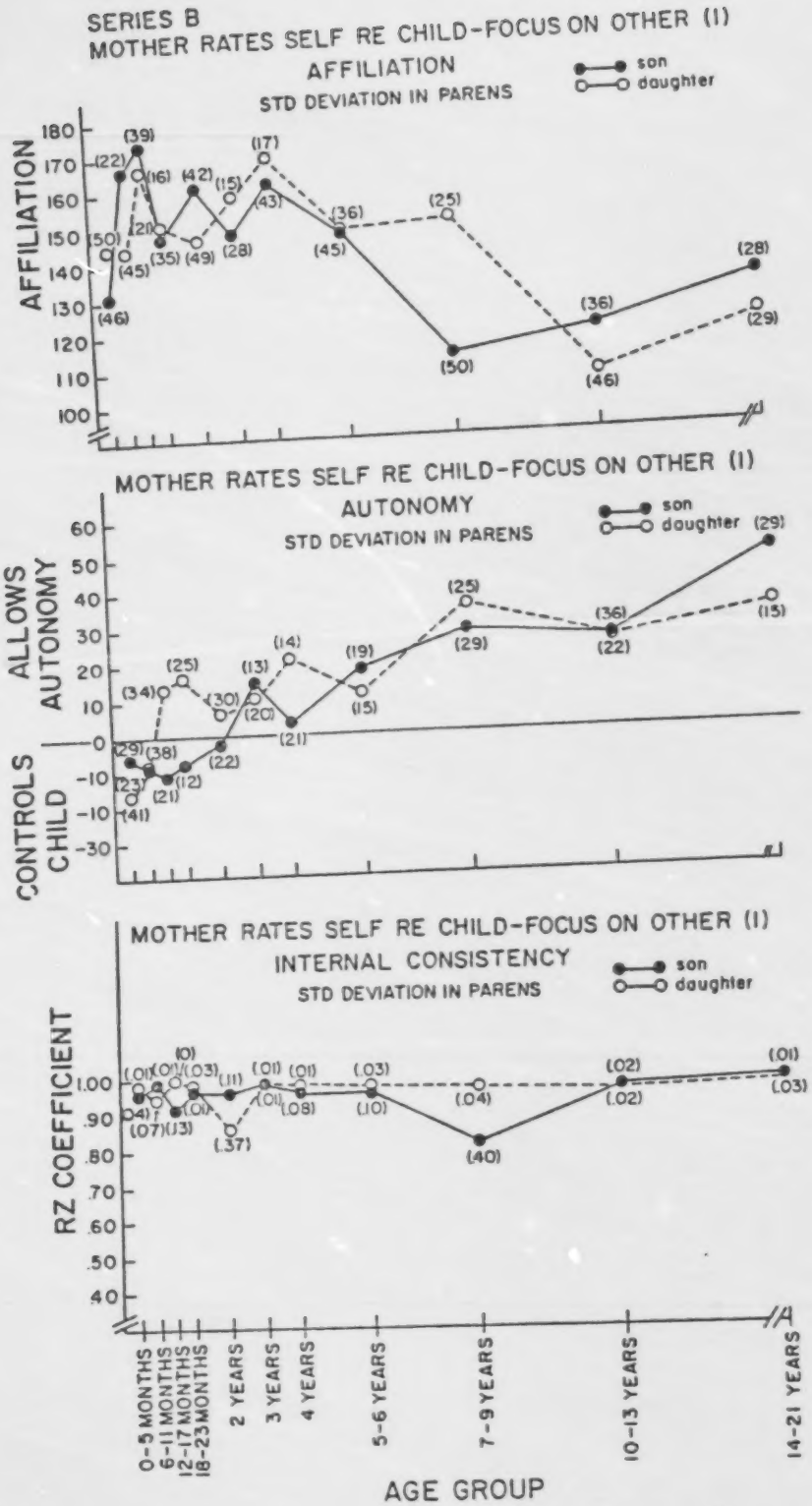
AUTONOMY



MOTHER RATES CHILD – FOCUS ON SELF (He/She)

INTERNAL CONSISTENCY



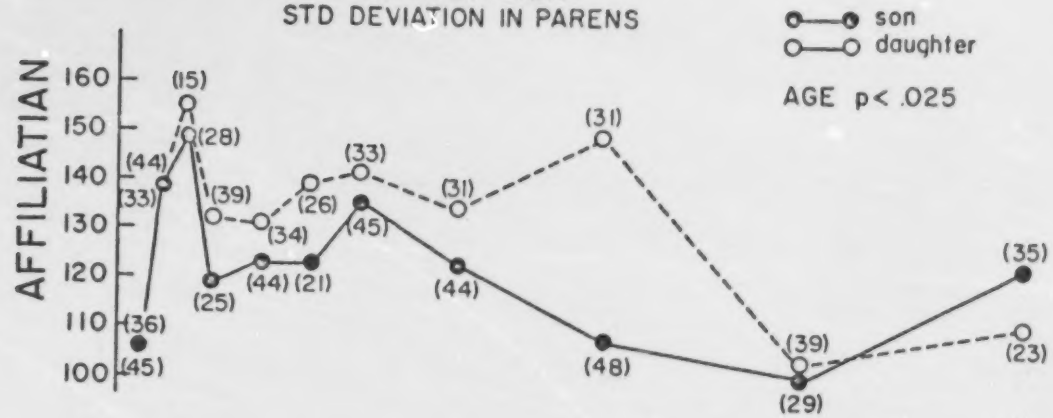

SERIES B
MOTHER RATES SELF RE CHILD-FOCUS ON OTHER (1)
AFFILIATION
STD DEVIATION IN PARENS
son
daughter
AFFILIATION
MOTHER RATES SELF RE CHILD-FOCUS ON OTHER (1)
AUTONOMY
STD DEVIATION IN PARENS
son
daughter
ALLOWS AUTONOMY
CONTROLS CHILD
MOTHER RATES SELF RE CHILD-FOCUS ON OTHER (1)
INTERNAL CONSISTENCY
STD DEVIATION IN PARENS
son
daughter
RZ COEFFICIENT
0-5 MONTHS
6-11 MONTHS
12-17 MONTHS
18-23 MONTHS
2 YEARS
3 YEARS
4 YEARS
5-6 YEARS
7-9 YEARS
10-13 YEARS
14-21 YEARS
AGE GROUP

SERIES B

MOTHER RATES SELF RE CHILD-FOCUS ON SELF (I)

AFFILIATION

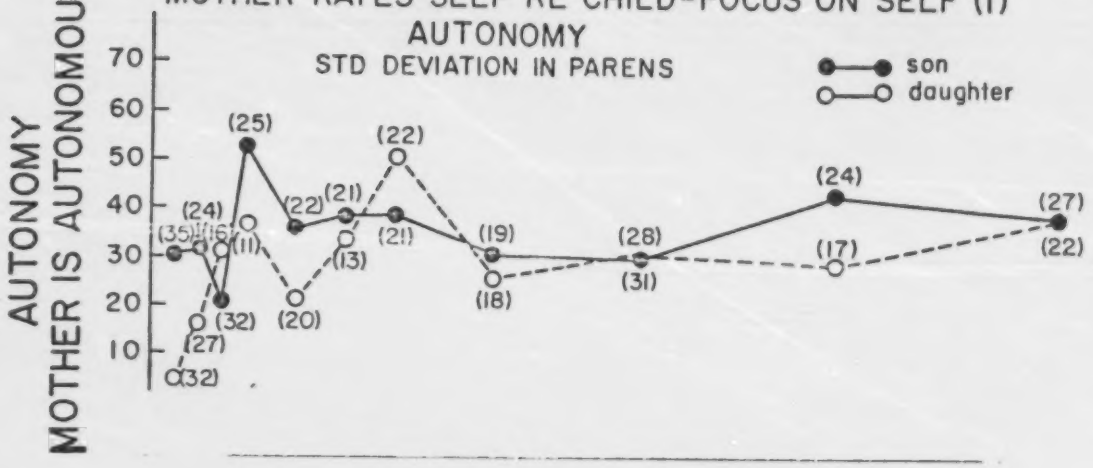
STD DEVIATION IN PARENS



MOTHER RATES SELF RE CHILD-FOCUS ON SELF (I)

AUTONOMY

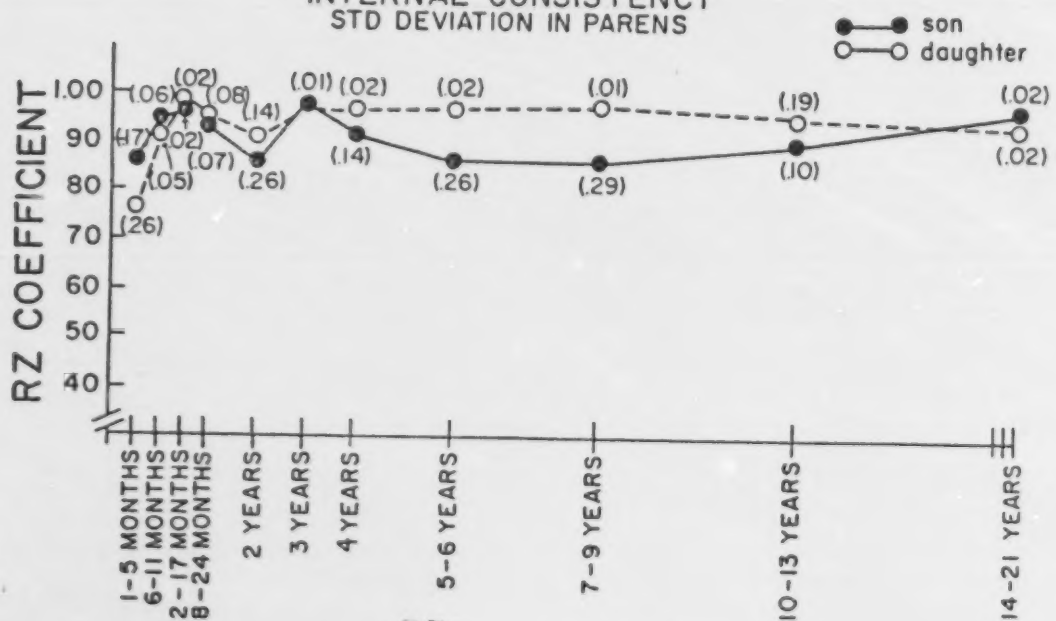
STD DEVIATION IN PARENS



MOTHER RATES SELF RE CHILD-FOCUS ON SELF (I)

INTERNAL CONSISTENCY

STD DEVIATION IN PARENS



Appendix VI

Developmental Trends as Described by SASB

One hundred seven mothers of pediatric outpatients rated their oldest child and 64 rated their youngest child whether or not the designated child was the one who had been brought to the clinic. The total sample of 171 consisted of 92 males and 79 females; ratings were completed at home and returned by mail. Sixty percent of the questionnaires distributed were returned completed, sometimes following a reminding phone call. The average family size was 2.6 children and 79 percent of the sample came from a large pediatric outpatient clinic affiliatied with a Catholic hospital serving a very broad range of socio-economic levels. Twenty-one percent of the sample came from a Family Health Service affiliated with the University of Wisconsin and consisted of undergraduate and graduate student parents. Children ranged in age from 0 to 21 years and before conducting the data analysis the sample was divided into 11 age groups. Measurements were examined at closer intervals in the younger age groups than in the older ones because physical and social change is presumed to occur much more rapidly in the early years. The allocation was Group 1, age 0 to 5 months, N = 17; Group 2, age 6 to 11 months, N = 16; Group 3, 12 to 17 months, N = 11; Group 4, age 18 to 23 months, N = 12; Group 5, age 2 years, N = 23; Group 6, age 3 years, N = 19; Group 7, age 4 years, N = 9; Group 8, age 5 and 6 years, N = 21; Group 9, age 7, 8 and 9 years, N = 15; Group 10, age 10 through 13 years, N = 13; Group 11, age 14 through 21 years, N = 13.

Questionnaires

Series A and B of the long-form questionnaires based on the original model (Benjamin, 1974) were used. Series A measured the mother's perception of the child's parentlike, focus on other (36 items) and childlike, focus on self (36 items) behavior. Each of the 72 items corresponded to one point on the interpersonal surfaces of the model; no measures were made in terms of the intrapsychic or introject surface. Series B consisted of the same items except they were reworded to measure the mother's perception of her own behaviors in relation to the child. For both Series A and Series B the mother gave an indication of applicability by assigning a score of 0-100 with anchor points at 0 = NOT AT ALL, NEVER, 50 = MODERATELY, SOMETIMES and 100 = ALWAYS, PERFECTLY. The long-form questionnaire has since been greatly shortened and four-times revised, so results will be presented in terms of key phrases from the long items and those phrases will be related to the newer model presented in Figure 1. For example, the long form item for the original chart point 147 read: "My (son) (daughter) interrupts me, barges in on me any time he pleases. He always wants to know what I'm doing and why, both when he is with me and when he is away from me". This item is reported in the present paper in terms of the key phrases: "Interrupts, keeps track". In the new model presented in Figure 1, the revision of this item measures point 137 because factor analyses of the old forms placed it on the hostile side of the dominance pole.

Statistical Analysis

Each item from both Series A (mothers rating children) and Series B (mothers rating themselves in relation to children) was analysed in terms of a sex by age unequal N analysis of variance (anova). This allowed identification of developmental trends, of between-sex differences, and of differences between the sexes in developmental change (i.e. the sex by age interaction). The youngest-oldest dimension was ignored because the sample size did not turn out to be sufficiently large to justify this further subdivision. In addition to item by item sex by age analysis, an anova was performed on weighted affiliation and weighted autonomy scores for the parentlike and childlike items from both Series A and Series B. Affiliation and autonomy scores represent a weighted average of all the ratings corresponding to a given surface of the model. The weighted affiliation score gives large positive weights for points which are close to the affiliation pole and assigns progressively lesser weights as distance from the affiliative pole is increased. Affiliation weights are negative on the left-hand side of the model and become more so as the disaffiliative pole is approached. Each item score is multiplied by these affiliation weights and the sum of the resulting products is a single numerical statement of the strength of the affiliation component of all the ratings describing a given surface of the model. As such, they represent a statement of the degree of friendliness of a specific group of items. Weighted autonomy scores follow the same logic except the weights are oriented

around the vertical axis and give very positive weights to items sampling points near the autonomy pole and very negative weights for items sampling points near the dominance-submission poles. The weighted autonomy scores provide an estimate of the degree to which ratings were more on the autonomy or on the dominance-submission side of the horizontal axis of the surface in question.

Results are presented in terms of the age by sex organization specified by the anova. Additional analyses are introduced and explained in the contexts in which they appear.

Results

Age Trends - Children

According to the anova of the 72 Series A items corresponding to the parentlike and childlike surfaces of Figure 1, 34 points showed significant differences between age groups at the .05 level or better. To organize 34 significant Fs in a way which can be regarded as a relatively conservative statement of developmental trends, it was decided to add another restriction to the identification of significant developmental trends. To be reported, items must not only have shown significant age differences by the anova but they must also have shown significant ($p<.05$ or better) age differences by the more conservative non-parametric extended median test (Siegel, 1956). The latter procedure makes no assumptions about the underlying distribution, identifies the median rating on a given item for all 171 children, and then presents for each age group the percentage of individuals which received an above-median rating. If the differences between age groups were significant by this test,

it showed that, relatively speaking, some age groups got higher scores on the item in question than did other age groups. The above-median test has the additional advantage of defining relative salience of socially undesireable or ego-alien behaviors more clearly than does a simple presentation of the mean ratings associated with the anova. To illustrate: mothers were asked to rate themselves and their children on "negative" items such as "my child says to me, scram, go away"; "my child says he hates me". It is to be expected that in a normal sample such items will receive quite low endorsements on the average, but the above-median test will very clearly reveal specific age groups for which endorsement was relatively greater.

The more conservative above-median test revealed that 21 of the 72 items had significant age group differences, and 20 of these were also significant by the anova. The introduction of the restriction that anova findings also be significant by the above-median test reduced the number of significant findings from 34 to 20 and was, as expected, a conservative step. Items meeting both these requirements were then arranged in subgroups according to similarity of curve shapes, i.e. developmental trends. Five such subgroups were identified: (1) Items showing a generally inverted U-shape with a leftward skew; (2) Items showing a progressive decline in endorsement with an increase in age; (3) Items showing a progressive ascent in endorsement from birth through adolescence; (4) Items showing a

sharp peaking in the age range 18 to 23 months and dropping sharply thereafter only to begin to reascend through adolescence; (5) Items peaking at age 3 but dipping sharply at age 4.

Figures VI-1 and VI-2 present these developmental trends for the Series A ratings of children. The Figures list key phrases from

---

Insert Figures VI-1 and VI-2 about here

---

the long-form items actually rated. Inspection of Figures VI-1 and VI-2 reveals that each of the five groups of curves describes interpersonal postures which seem to be related. As a result it is possible to name the five subgroups of items which were defined on the basis of curve shape in terms of familiar psychiatric concepts. The first group includes items showing a progressive increase from birth through year 1 or 2, and consists of items with key phrases such as: hugs, tender touch; smiles, warm welcome; understands, accepts me; follows, clings, bugs. These behaviors are very affiliative and involve child's active focusing on the mother; the behaviors described require some time to develop, reach a maximum in early childhood and resemble Bowlby's (1969) attachment phases 2 and 3. This group is named active attachment.

The second group includes items starting with a relatively high degree of endorsement, then showing progressive decreases with age and includes key phrases such as joyfully accepts; trusts, counts on; is calmed, refreshed by me; picks up my mood, ways; has

a warm response to me, likes me. This cluster of items is also very affiliative but involves the child focusing on him/herself in relation to the mother and appears in the childlike region of friendly submissiveness in Figure 1. The group corresponds to the receptive dependency and trust described by the analytic literature (Erikson, 1959) and is named receptive attachment.

The third group includes items showing a progressive increase from birth through adolescence includes items with key phrases: excludes me, tells others; is sensible, clear. These appear to describe differentiated adult-like ego function in relation to the mother.

The fourth group includes items peaking at 18 to 23 months (group 4 entered in Figure VI-1 at the point labeled age 1) dropping thereafter, and then gradually reascending through adolescence. This group includes items with key phrases: shouts, ridicules, mocks; says do not touch me; goes his/her own way; says I should go away, scram. This group resembles hostile, oppositional behaviors recognized in the child development ages and stages literature (e.g. Ilg and Ames, 1955, pp 22-24) and interpreted by analytic theorists such as Mahler (1968, pp 18-23) as being critical to the process of differentiation or separation from the mother. They also relate to the struggle of autonomy mentioned by Erikson for this approximate age range. Mahler and Erikson both mention the recurrence of such negativistic behaviors again in adolescence as essential to the formation of adult identity. This group of items is named disaffiliative independence.

The fifth group includes items peaking at age 3 and dipping sharply at age 4 is shown in Figure VI-2. Key phrases are: shares, shows self; confirms, encourages; protects, keeps company; supports, back me up. These behaviors can be reasonably related to interpersonal aspects of the Oedipal stage said to become salient around age 3 as well as to Mahler's (1968, pp 23-24) description of the rapprochement between mother and child. The very friendly behaviors described by this group involve focus and influence on the mother and are classified in the parentlike section of Figure 1. An exception is the item with key phrases: shares, shows self; this item involves focus on the self and does not involve any dominance. Interestingly, this one item does not exactly fit the pattern of the group in that it actually peaks much earlier. It is reasonable that parentlike focusing on the mother, i.e. decreased focus on the self would follow the separation from her at 18-23 months. Behaviors reported by mothers interviewed to determine what they had in mind when endorsing this group of items included offering her a Kleenex if she was crying, giving her hugs and kisses if she seemed sad, bringing her a cookie if she was ill. This group is named loving caretaker. Other such evidence that such young children can in fact show such empathic behavior has been recently reported by Borke (1971, 1975).

Anovas of the weighted affiliation and weighted autonomy scores showed a significant difference between age groups in parentlike autonomy scores. There was a rather orderly increase between successive age groups in the tendency for children to allow their mothers to have

more autonomy. Average weighted autonomy scores were negative only for the first year of life (groups 1 and 2) and this suggests that general control of the mother's time, space and supplies did exist for that period of time. Anova also revealed that the weighted affiliation scores for the childlike domain described by Figure 1 showed significant differences between age groups. The trend here was to start at a very high level for the youngest age group and progressively drop, although weighted affiliation remained quite high even through the adolescent group. This would suggest there is a very strong generalized attachment by children to mothers which drops somewhat with increasing age.

Age Trends - Mothers

The anova of Series B, mothers rating themselves in relation to their children, revealed 28 items with differences significant at the .05 level or better for the age dimension. The above-median test showed 12 items having significant differences between age groups and 9 of these had significant differences by both the anova and the extended median test. The 9 are shown in Figure 4 and the first group paralleled the active attachment group of Figure 2. Key phrases for

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Insert Figure VI-3 about here

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items which showed the left-skewed inverted-U trend are: boss, in charge; smile, welcome; interrupt, keep track. Two of these items are classified near the dominance pole of the parentlike surface of Figure 1 and the other is near the affiliative pole. Dominance and warmth are two variables which have been consistently identified in the child development

literature as being critically important in imitation, identification and the formation of conscience (e.g. Kagan, 1958; Hoffman, 1967). The present data suggest, then, that the child's active attachment to the mother correlates with the mother's dominance and warmth, i.e. friendly influence.

One item from Series B paralleled the second group from Series A; the item involving key phrases: I anticipate his/her every need, started with a relatively high degree of endorsement followed by a progressive decrease. It would appear that nurturance given before or just as the need arose paralleled the receptive attachment shown by the children; both anticipatory nurturance and receptive attachment decreased with age.

One item from Series B paralleled the third group from Series A and involved key phrases: I treat him/her as self-sufficient. This Series B item paralleled the children's tendency to exclude the mother and to be sensible, clear, reasonable when interacting with her. It would appear that there is a progressive tendency to treat the child as more adult-like and this is matched by a tendency to be more rational with the mother as well as to turn more to peers.

Four significant items from Series B showed a unique pattern which did not parallel any of those from Series A. The fourth group in Figure VI-3 is characterized by the inverse of what is shown in the fourth cluster in Figure VI-1. Rather than peaking at 18-23 months, this group dipped; and rather than ascending toward adolescence, this group descended. Key phrases for this group were: I like him/her, return his/her snuggles; I understand, accept him/her; I protect, keep

him/her company; I attend his/her wounds, groom him/her. It would appear that during the times the children peaked in disaffiliative independence, namely 18-24 months and at adolescence, the mothers sharply cut back reports of warm, understanding, protective behaviors on their part. This observation serves as a reminder of the old saying that "love begets love" and of the more recent research calling attention to the interactive aspects of mother-child transactions (e.g. Bell, 1971) with the accompanying implication that causality may not be assumed to always move in the direction mother to child.

Anova of the weighted affiliation and attachment scores for Series B gave results very similar to Series A. It appears the mothers' generalized control of children was also maximal during the first year, suggesting that mothers controlled infants' time, space and supplies as well as the infants' control of mothers discussed above. With both members of the dyad dominating there is a maximally unstable, noncomplementary situation according to the model and this may relate to frequent reports from mothers of infants to the effect that they want to "get out of there", to "take a break" (i.e. fleeing is the antithesis of loving control). Despite this implied tension, mothers also showed a very high level of generalized childlike attachment to their children with a peaking between age 6 to 17 months and a decrease thereafter. Family therapists dealing with husbands' feeling affectionally displaced by their infants will have no difficulty interpreting this result.

Sex Differences - Children

Significant sex differences revealed by the anovas of items and weighted scores are displayed in Table VI-1. Inspection of the Series A part of the Table shows that all three items for which the males

received significantly greater ratings had to do with independence from

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Insert Table VI-1 about here

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the mother. Males were reported as showing a slight but significantly greater tendency to avoid the mother; to spend time away from her with peers although they were playful when they were with her; and to fail to back the mother up leaving her to solve her own problems. Female children, by contrast, were endorsed as being more supportive of the mother; more encouraging that she should "do her own thing"; and more likely to calm, kiss and caress her. The findings shown for children in Table 1 are consistent with the belief in the culture and in the profession that in general, normal males are more independent of, less attached to their mothers; normal females tend to be closer to and more supportive of their mothers.

Sex Differences - Mothers

Table VI-1 also presents significant differences between the sexes for Series B. The mothers of males reported themselves as having been tearful and lonely over the loss of their child and also of having done more interrupting and keeping track of the male children. Presumably if the males were showing more independence it is logical that the mothers would have found themselves doing more tracking of them and more responding to the loss of their presence. In relation to female children, mothers reported themselves as responding more warmly, sharing more kissing and caressing and accepting more help. In addition mothers acknowledged they were more defensive and jumpy with their female child. These findings are generally consistent with reports of the female children being closer to the mothers and more supportive of them (e.g. Sears et. al., 1957, pp 401).

The Age by Sex Interaction - Children

The age by sex interaction for the Series A ratings of children was significant at the .05 level or better in 6 of the 72 anovas. The nature of the interaction for these 6 items was complex, but was usually consistent with the pattern shown in Figure VI-4; that Figure presents the mean weighted childlike autonomy scores for each of the sexes at

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Insert Figure VI-4 about here

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each age and the interaction displayed in the Figure was significant at the .05 level. Average autonomy can be seen to have been variable up to age 4 with a slight tendency for males to have been less autonomous during the preschool years. After entering elementary school, age 5 - 6, males became consistently more autonomous than females. The trend for males to be more submissive in the preschool age range and more autonomous later was particularly clear for the item with the key phrase "goes his own way". This phenomenon of males having been more dependent at first and more autonomous later has also been observed in rhesus monkeys (Jensen and Bobbit, 1968).

One of the advantages of the model is the distinction between submissiveness and attachment. Despite the fact that many families teach that submissiveness is love ("If you loved me you would..."; "I love you so much, I'd do anything for you") the model places them at right angles, i.e. presents them as orthogonal or independent. The present data on sex differences illustrate the importance of the distinction: sex differences and sex x age differences suggest that excessive scores for males have to do with the interdependence or power (vertical) dimension whereas excessive scores for females have to do with affiliative (horizontal) dimension.

A closer examination of the sex by age interactions is provided by Table VI-2 which presents the results of multiple t tests comparing

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Insert Table VI-2 about here

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males and females within each age group. Because the reversal between the sexes in average weighted autonomy scores occurred at the end of the preschool years, the table pools age groups before and after this point; thus the table parallels the trends shown in Figure VI-4. In addition, Table 2 groups the number of significant ts according to proximity to axes of the model. The 50% of the items representing points closest to the horizontal axis are presented in one block, and the 50% of the items representing points closer to the vertical axis are presented in two blocks arranged so that the topology of Table VI-2 is as similar as possible to the topology of Figure 1.

Inspection of the right hand side of Table 2, representing the affiliative side of Figure 1 confirms the interpretation of Figure 4. A two-tailed sign test of the number of significant ts comparing males and females showed that in the dominance-submission region of the model, preschool males got significantly higher scores than females in significantly more of the contrast (sign test of 17:3 under the 50-50 hypothesis). During the same preschool age range significantly more contrasts (19:7) revealed females giving and taking more autonomy. During the elementary school age range, this reversed, with significantly more contrasts demonstrating males to be more giving and taking of autonomy in relation to their mothers (14:1).

On the horizontal axis, however, far more contrasts (27:4) showed preschool females to be more attached to their mothers and, interestingly, during the later elementary school age range, more contrasts showed females to be more disaffiliative (12:3) in relation to their mothers. This would suggest that attachment is a more dynamic issue between mothers and daughters, being relatively stronger at first, and then reversing later; by contrast, power-inedpendence is a more dynamic issue between mothers and sons, there being more interdependence at first, and more independence later. These differences between the sexes apparently persist through adulthood where one frequently encounters the female wish for more warmth and the male wish for more independence in intimate relationships.

Appendix VI References

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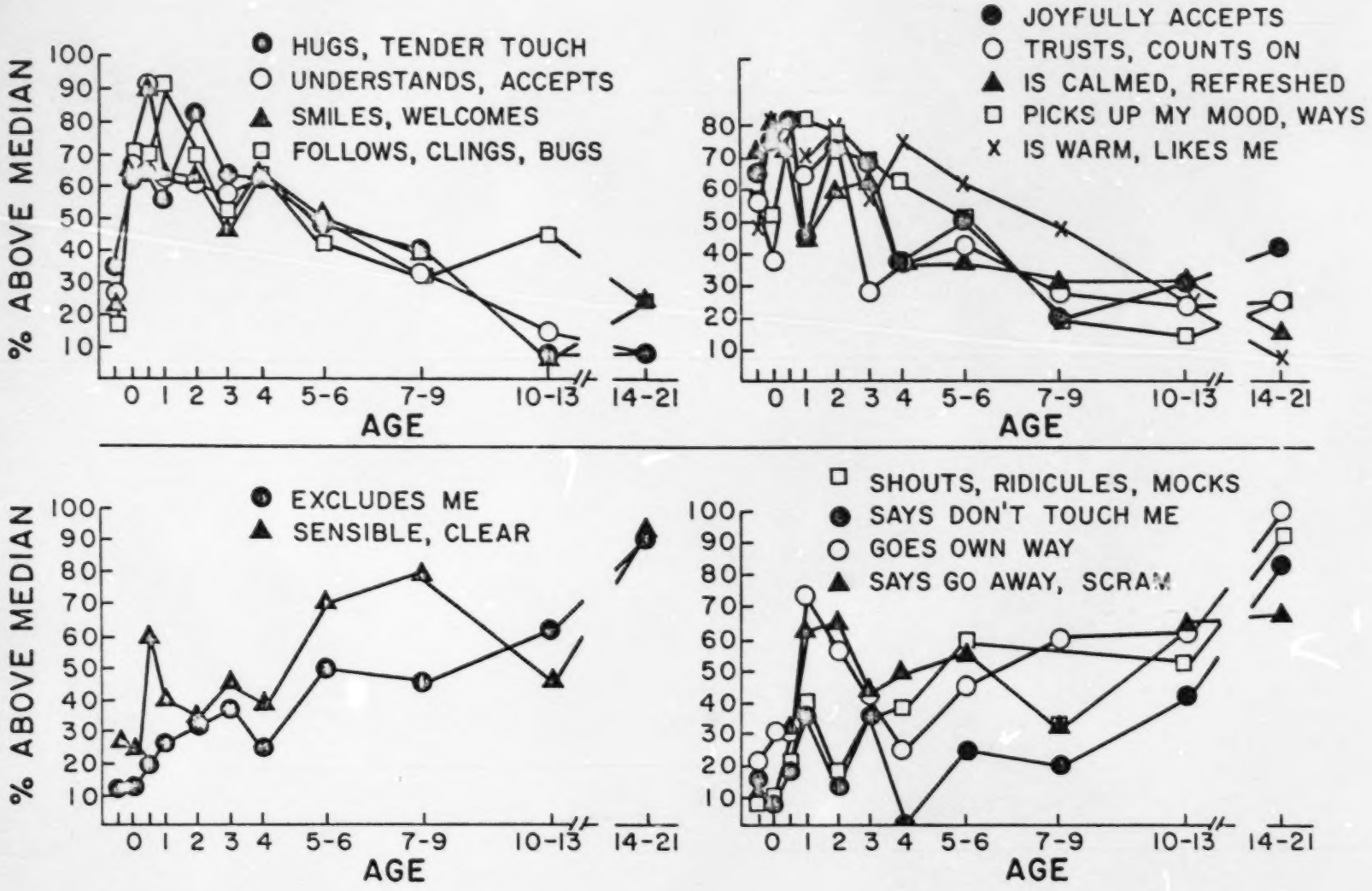
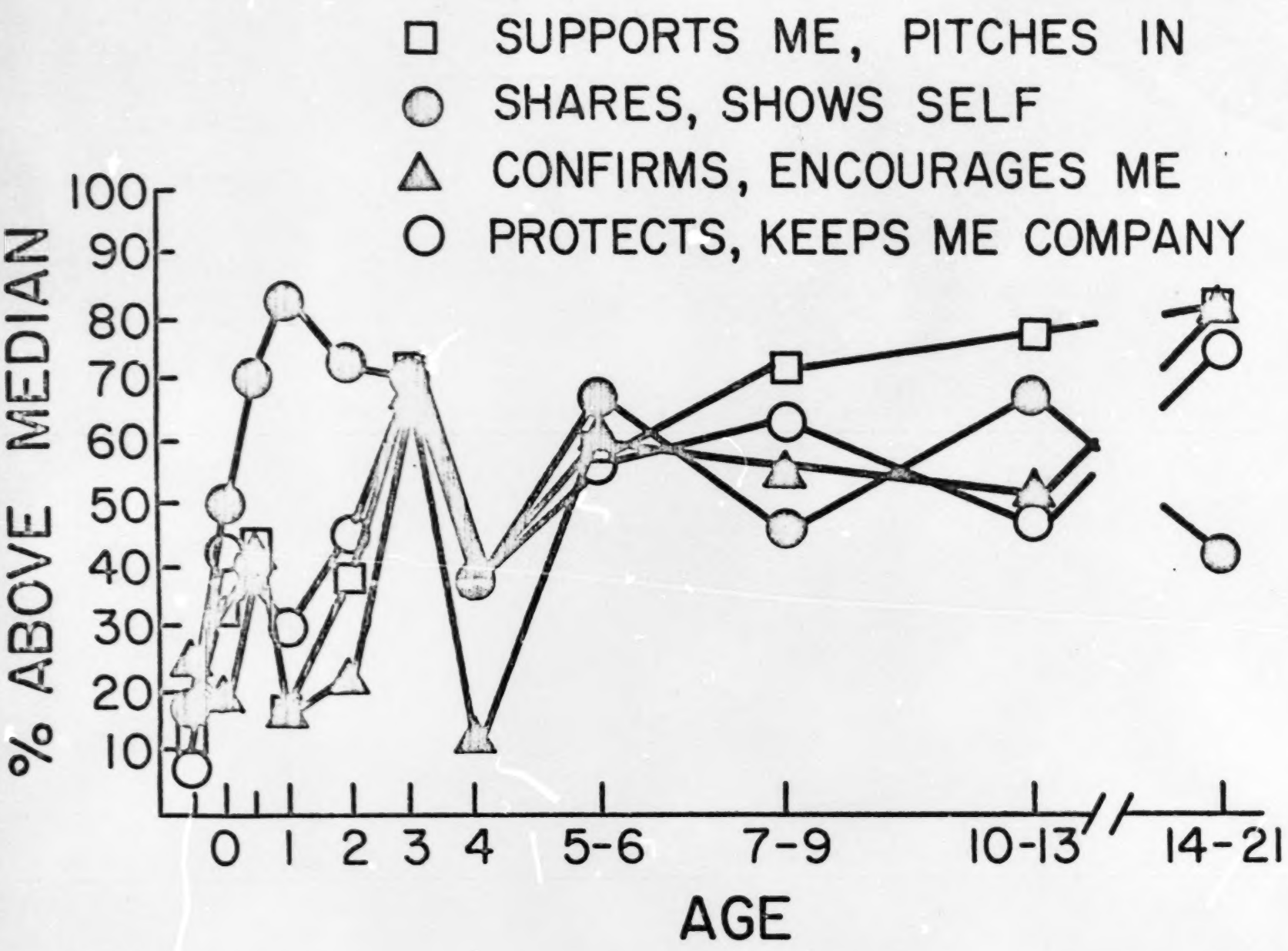
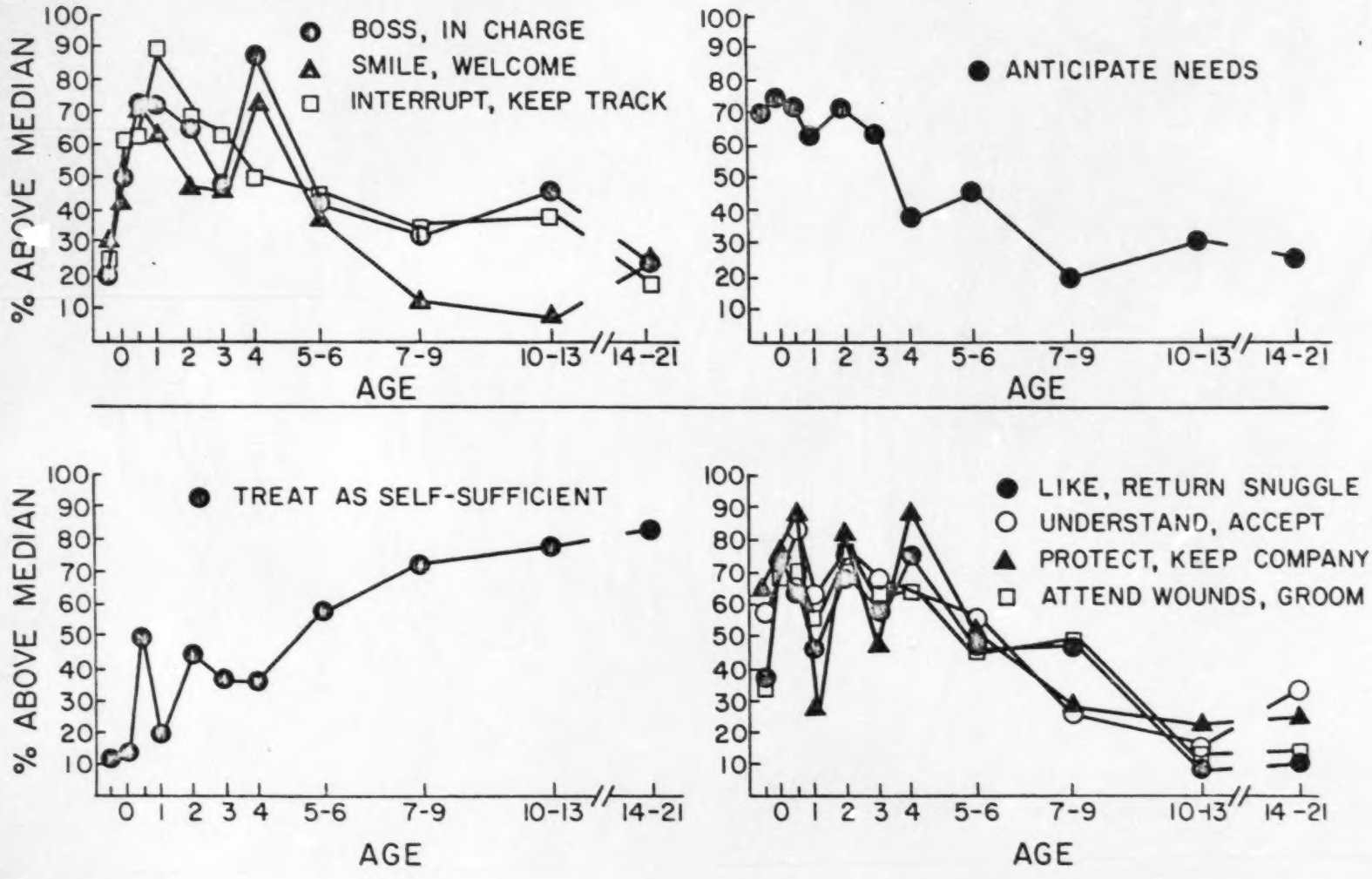
SERIES A - MOTHERS RATE CHILDREN




SUPPORTS ME, PITCHES IN
SHARES, SHOWS SELF
CONFIRMS, ENCOURAGES ME
PROTECTS, KEEPS ME COMPANY
% ABOVE MEDIAN
100
90
80
70
60
50
40
30
20
10
0
1
2
3
4
5-6
7-9
10-13
14-21
AGE


% ABOVE MEDIAN
100
90
80
70
60
50
40
30
20
10
BOSS, IN CHARGE
SMILE, WELCOME
INTERRUPT, KEEP TRACK
0 1 2 3 4 5-6 7-9 10-13 14-21
AGE
ANTICIPATE NEEDS
0 1 2 3 4 5-6 7-9 10-13 14-21
AGE
% ABOVE MEDIAN
TREAT AS SELF-SUFFICIENT
0 1 2 3 4 5-6 7-9 10-13 14-21
AGE
LIKE, RETURN SNUGGLE
UNDERSTAND, ACCEPT
PROTECT, KEEP COMPANY
ATTEND WOUNDS, GROOM
0 1 2 3 4 5-6 7-9 10-13 14-21
AGE

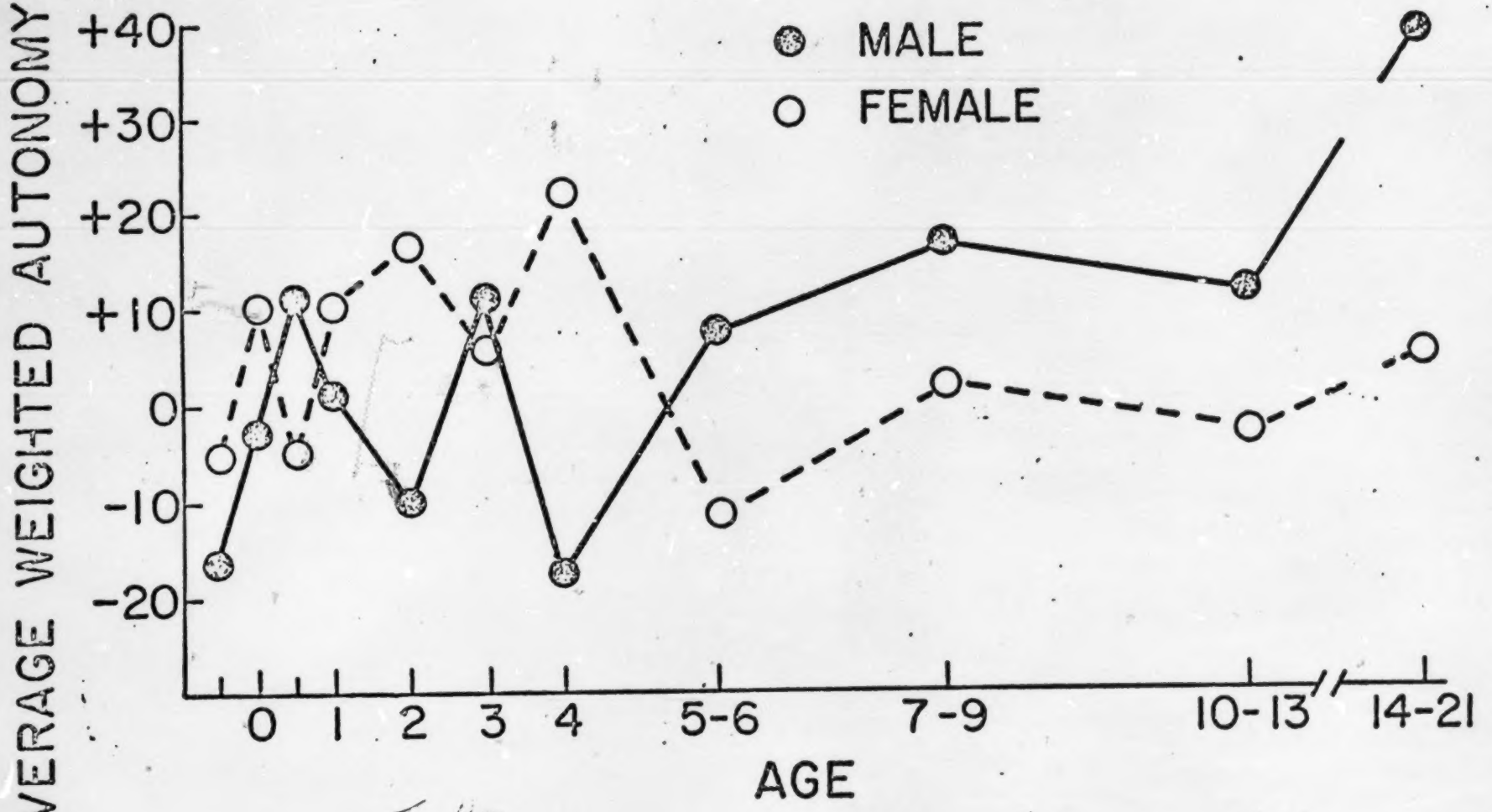


FIGURE II-4- AVERAGE WEIGHTED AUTONOMY SCORES

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Table VI-1

Sex Differences

Children (Series A)

Item - Key Phrases	Male Mean	Female Mean	p	M→F	F→M
Avoids me	5	2	.05	X	
Fun with me and away with peers	81	73	.05	X	
Leaves, doesn't back me up	20	12	.05	X	
Supports, pitches in	24	36	.05		X
Encourages my own "thing"	32	40	.05		X
Calms, kisses, caresses me	27	38	.025		X

Mothers (Series B)

I interrupt, keep track	35	26	.025	X	
I am tearful, sad, lonely without him	14	9	.025	X	
I respond warmly, like	69	80	.001		X
I calm, kiss, caress	72	79	.05		X
I accept help	42	60	.001		X
I cringe, defend, act "jumpy"	4	8	.025		X

TABLE 2 - Number of items showing significant differences between males and females grouped according to proximity to axes in Figure 1.

CLOSEST AXIS	DISAFFILIATIVE CHART POINTS	PRESCHOOL		ELEMENTARY SCHOOL		PRESCHOOL		ELEMENTARY SCHOOL		AFFILIATIVE CHART POINTS
	SEX ↗ THE OTHER	M	F	M	F	M	F	M	F	
VERTICAL	P:125 to 128	3	2	1	1	5	14	8*	1	P:120 to 115
	C:225 to 228	2	3	3	1	2	5	6*	0	C:220 to 215
	P + C TOTAL	5	5	4	2	7	19*	14**	1	P + C TOTAL
HORIZONTAL	P:134 to 124	6	1	2	4	3	20**	2	4	P:114 to 144
	C:234 to 224	3	2	1	8	1	7	3	3	C:214 to 244
	P + C TOTAL	9	3	3	12*	4	27**	5	7	P + C TOTAL
VERTICAL	P:138 to 135	2	2	1	2	7	1	0	1	P:145 to 140
	C:238 to 235	2	3	0	4	10*	2	1	3	C:245 to 240
	P + C TOTAL	4	5	1	6	17**	3	1	4	P + C TOTAL

*$p \leq .05$

**$p < .01$

Appendix VII - continued
EXAMPLE FOR 3 SETS OF DATA
1 = Standard complete series,
2 and 3 = miscellaneous

```
@run carey, 12345,1234556890,2M,100
program deck + standard input
003
009
person rates Introject
108003036004
Significant other focuses on me (top) and on him/herself (bottom)
072002072003
I focus on significant other (top) and on myself (bottom)
072002072003
Mother focuses on me (top) and on herself (bottom)
072002072003
I focus on mother (top) and on myself (bottom)
072002072003
Father focuses on me (top) and on himself (bottom)
072002072003
I focus on father (top) and on myself (bottom)
072002072003
Mother focuses on father (top) and on herself (bottom)
072002072003
Father focuses on mother (top) and on himself (bottom)
072002072003
DATA CARDS (set #1)
-2
001
Significant other focuses on me (top) and on him/herself (bottom)
072002072003
DATA CARDS (set #2)
-2
002
Significant other focuses on me (top) and on him/herself (bottom)
072002072003
I focus on significant other (top) and on myself (bottom)
072002072003
DATA CARDS (set #3)
-2
```

RUN CARD

PROGRAM DECK (ORD 2, LAG, CORONY, ORD 4) FOLLOWED BY A STANDARD PROGRAM INPUT DECK
DATA
/ INPUT DECK (consisting of the following cards):

1) One card with a 3 digit number punched in columns 1-3, indicating the # of sets of ratings which follow (e.g. 003 - 3 sets of ratings)

2) One card with a 3 digit number punched in columns 1-3, indicating the # of ratings in the first set (e.g. 009 - 9 ratings in the first set)

3) Title card for the first rating (free field)

4) One card with the number 072002072003 (for a 72 item rating of Surfaces 1 & 2) or 108003036004 (for a 36 item rating of Surface 3) - punched in columns 1-12

5) Steps 3 and 4 are repeated for as many ratings as are in the set

6) DATA CARDS

   a) 36 item ratings (rating self) are punched with a 36F2.0 format in columns 1-72. Columns 73-80 are free field, generally used for identification purposes. 100 is punched as 99. No answer is punched as -1

   b) 72 item ratings (rating others and self in relation to others) are punched on 2 cards, in the same manner as the 36 item ratings. The cards must be kept in order when run, with the first 36 items on the first card and the last 36 items on the second card

   c) Any number of sets of data cards can be run, one set after another. Data cards for each subject, however, must be in the order specified in steps 3 - 5

7) One card with the digit -2 punched in columns 1-2 is used to signify the end of the data for that particular set.

8) Repeat steps 2-7 for all additional data sets

9) A @fin card is the last card of the entire deck, and signifies the end of the entire run

Appendix VIII - KEY TO INTERPRETING ORD 4 OUTPUT

ORD 4
OUTPUT READS

COMPLEMENTARY D WITH HE/SHE FOCUSING ON OTHER FOR SIG. OTHER, MOTHER, FATHER, MODELS

	SIGNIFICANT OTHER	MOTHER	FATHER	MODELS

		I FOCUS ON MYSELF		SHE/HE FOCUSES ON ME	
OTHER	RESPECTIVE COORDINATES =	_____	_____	_____	_____
MOTHER	" "	_____	_____	_____	_____
FATHER	" "	_____	_____	_____	_____
MODELS	" "	_____	_____	_____	_____
		(FATHER)		(MOTHER)	

COMPLEMENTARY D WITH I FOCUSING ON OTHER FOR SIG. OTHER, MOTHER, FATHER, MODELS

	SIGNIFICANT OTHER	MOTHER	FATHER	FATHER RE MOTHER

		I FOCUS ON OTHER		SHE/HE FOCUSES ON HER/HIMSELF	
OTHER	RESPECTIVE COORDINATES =	_____	_____	_____	_____
MOTHER	= =	_____	_____	_____	_____
FATHER	= =	_____	_____	_____	_____
MODELS	= =	_____	_____	_____	_____
		(FATHER)		(MOTHER)	